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IN WILDEST AFRICA

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IN WILDEST AFRICA

BY

C. G. SCHILLINGS

AUTHOR OF "WITH FLASHLIGHT AND RIFLE IN EQUATORIAL EAST AFRICA"

TRANSLATED BY

FREDERIC WHYTE

WITH OVER 300 PHOTOGRAPHIC STUDIES DIRECT FROM THE AUTHOR'S NEGATIVES, TAKEN BY DAY AND NIGHT; AND OTHER ILLUSTRATIONS

VOL. II

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YOUNG DWARF ANTELOPE

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CORMORANTS.

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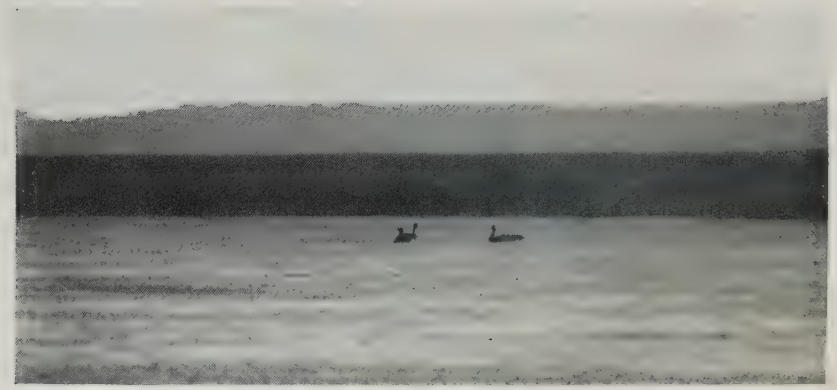


SPURRED GEESE (*PLECTROPTERUS GAMBENSIS*).

VIII

In a Primeval Forest

SCENES of marvellous beauty open out before the wanderer who follows the windings of some great river through the unknown regions of Equatorial East Africa.

The dark, turbid stream is to find its way, after a thousand twists and turns, into the Indian Ocean. Filterings from the distant glaciers of Kilimanjaro come down into the arid velt, there to form pools and rivulets that traverse in part the basin of the Djipe Lake and at last are merged in the Rufu River. As is so often the case with African rivers, the banks of the Rufu are densely wooded throughout its long course, the monotony of which is broken by a number of rapids and one big waterfall. Save in those rare spots where the formation of the soil is favourable to their growth, the woods do not extend into the velt. Trees and shrubs alike become parched

a few steps away from the sustaining river. The abundance of fish in the river is tremendous in its wilder reaches—inexhaustible, it would seem, despite the thousands of animal enemies. The river continually overflows its banks, and the resulting swamps give such endless opportunities for spawning that at times every channel is alive with fry and inconceivable multitudes of small fishes.

It is only here and there and for short stretches that the river is lost in impenetrable thickets. Marvellous are those serried ranks of trees! marvellous, too, the sylvan galleries through which more usually it shapes its way! They take the eye captive and seem to withhold some unsuspected secret, some strange riddle, behind their solid mass of succulent foliage. It is strange that these primeval trees should still survive in all their strength with all the parasitic plants and creepers that cling to them, strangling them in their embrace. You would almost say that they lived on but as a prop to support the plants and creepers in their fight for life. Convolvuli, white and violet, stoop forward over the water, and the golden yellow acacia blossoms brighten the picture.

In the more open reaches dragonflies and butterflies glisten all around us in the moist atmosphere. A grass-green tree-snake glides swiftly through the branches of a shrub close by. A Waran (*Waranus niloticus*) runs to the water with a strange sudden rustle through the parched foliage. Everywhere are myriads of insects. Wherever you look, the woods teem with life. These woods screen the river from the neighbouring velt, the uniformity of which is but seldom broken in upon by

C. G. Schillings, phot.

VIEW OF MAWENZI, THE HIGHEST PEAK BUT ONE OF KILIMANJARO, TAKEN WITH A TELEPHOTO-LENS.

C. G. Schillings, phot.

VIEW OF KILIMANJARO, TAKEN AT SUNSET.

patches of vegetation. The character of the flora has something northern about it to the unlearned eye, as is the case so often in East Africa. It is only when you come suddenly upon the Dutch palms (*Borassus æthiopicus*, Mart., or the beautiful *Hyphæne thebaica*, Mart.) that you feel once again that you are in the tropics.

The river now makes a great curve round to the right. A different kind of scene opens out to the gaze—a great stretch of open country. In the foreground the mud-banks of the stream are astir with huge crocodiles gliding into the water and moving about this way and that, like tree-trunks come suddenly to life. Now they vanish from sight, but only to take up their position in ambush, ready to snap at any breathing thing that comes unexpectedly within their reach. Doubtless they find it the more easy to sink beneath the surface of the river by reason of the great number of sometimes quite heavy stones they have swallowed, and have inside them. I have sometimes found as much as seven pounds of stones and pebbles in the stomach of a crocodile.

The deep reaches of the river are their special domain. Multitudes of birds frequent the shallows, knowing from experience that they are safe from their enemy. One of the most interesting things that have come under my observation is the way these birds keep aloof from the deep waters which the crocodiles infest. I have mentioned it elsewhere, but am tempted to allude to it once again.

Our attention is caught by the wonderful wealth of bird-life now spread out before us in every direction. Here comes a flock of the curious clatter-bills (*Ana-*

stomus lamelligerus, Tem.) in their simple but attractive plumage. They have come in quest of food. Hundreds of other marsh-birds of all kinds have settled on the outspread branches of the trees, and enable us to distinguish between their widely differing notes.

Among these old trees that overhang the river, covered with creepers and laden with fruit of quaint shape, are Kigelia, tamarinds, and acacias. In amongst the dense branches a family of Angolan guereza apes (*Colobus palliatus*, Ptrs.) and a number of long-tailed monkeys are moving to and fro. Now a flock of snowy-feathered herons (*Herodias garzetta*, L., and *Bubulcus ibis*, L.) flash past, dazzlingly white—two hundred of them, at least—alighting for a moment on the brittle branches and pausing in their search for food. Gravely moving their heads about from side to side, they impart a peculiar charm to the trees. Now another flock of herons (*Herodias alba*, L.), also dazzlingly white, but birds of a larger growth, speed past, flying for their lives. Why is it that even here, in this remote sanctuary of animal life, within which I am the first European trespasser, these beautiful birds are so timorous? Who can answer that question with any certainty? All we know is, that it has come to be their nature to scour about from place to place in perpetual flight. Perhaps in other lands they have made acquaintance with man's destructiveness. Perhaps they are endowed with keener senses than their smaller snow-white kinsfolk, which suffer us to approach so near, and which, like the curious clatter-bill (which have never yet been seen in captivity), evince no sign of shyness—

C.G. Schillings, phot.

KIBO IN THE FOREGROUND, WITH THE SADDLE-SHAPED RANGE CONNECTING IT WITH MAWENZI IN THE DISTANCE. THE AVERAGE HEIGHT OF THIS "SADDLE" IS MORE THAN 16,000 FEET.

nothing but a certain mild surprise—at the sight of man.

Now, with a noisy clattering of wings, those less comely creatures, the Hagedasch ibises, rise in front of us, filling the air with their extraordinary cry: "Heiha! Ha heiha!"

Now we have a strange spectacle before our eyes—a number of wild geese, perched upon the trees. The great, heavy birds make several false starts before they make up their minds to escape to safety. They present a beautiful sight as they make off on their powerful wings. They are rightly styled "spurred geese," by reason of the sharp spurs they have on their wings. Hammerheads (*Scopus umbretta*, Gm.) move about in all directions. A colony of darters now comes into sight, and monopolises my attention. A few of their flat-shaped nests are visible among the pendent branches of some huge acacias, rising from an island in mid-stream. While several of the long-necked fishing-birds seek safety in flight, others—clearly the females—remain seated awhile on the eggs in their nests, but at last, with a sudden dart, take also to their wings and disappear. Beneath the nesting-places of these birds I found great hidden shaded cavities, the resorts for ages past of hippopotami, which find a safe and comfortable haven in these small islands.

The dark forms of these fishing-birds present a strange appearance in full flight. They speed past you swiftly, looking more like survivals from some earlier age than like birds of our own day. There is a suggestion of flying lizards about them. Here they come, describing a great

curve along the river's course, at a fair height. They are returning to their nests, and as they draw near I get a better chance of observing the varying phases of their flight.

But look where I may, I see all around me a wealth of tropical bird-life. Snow-white herons balance themselves on the topmost branches of the acacias. Barely visible against the deep-blue sky, a brood-colony of wood ibis pelicans (*Tantalus ibis*, L.) fly hither and thither, seeking food for their young. Other species of herons, notably the black-headed heron, so like our own common heron (*Ardea melanocephala*, Vig., Childr.), and further away a great flock of cow-herons (*Bubulcus ibis*, L.), brooding on the acacias upon the island, attract my attention. Egyptian Kingfishers (*Ceryle rudis*, L.) dart down to the water's edge, and return holding tiny fishes in their beaks to their perch above.

The numbers and varieties of birds are in truth almost bewildering to the spectator. Here is a marabou which has had its midday drink and is keeping company for the moment with a pair of fine-looking saddled storks (*Ephippiorhynchus senegalensis*, Shaw); there great regiments of crested cranes; single specimens of giant heron (*Ardea goliath*, Cretzschm.) keep on the look-out for fish in a quiet creek; on the sandbanks, and in among the thickets alongside, a tern (*Œdicnemus vermiculatus*, Cab.) is enjoying a sense of security. Near it are gobbling Egyptian geese and small plovers. A great number of cormorants now fly past, some of them settling on the branches of a tree which has fallen into the water. They are followed by Tree-geese (*Dendrocygna viduata*, L.),

C. G. Schillings, phot

RIVER-BED VEGETATION ON THE VELT.

some plovers and night-herons, numerous sea-swallows as well as seagulls; snipe (*Gallinago media*, Frisch.), and the strange painted snipe (*Rostratula bengalensis*, L.), the *Actophylus africanus*, and marsh-fowl (*Ortygometra pusilla obscura*, Neum.), spurred lapwing (*Hoplopterus speciosus*, Lcht.), and many other species. Now there rings out, distinguishable from all the others, the clear cry—to me already so familiar and so dear—of the screeching sea-eagle, that most typical frequenter of these riverside regions of Africa and so well meriting its name. A chorus of voices, a very Babel of sound, breaks continually upon the ear, for the varieties of small birds are also well represented in this region. The most beautiful of all are the cries of the organ-shrike and of the sea-eagle. The veritable concerts of song, however, that you hear from time to time are beyond the powers of description, and can only be cherished in the memory.

There is a glamour about the whole life of the African wonderland that recalls the forgotten fairy tales of childhood's days, a sense of stillness and loveliness. Every curve of the stream tells of secrets to be unearthed and reveals unsuspected beauties, in the forms and shapes of the Phœnix palms and all the varieties of vegetation; in the indescribable tangle of the creepers; in the ever-changing effects of light and shade; finally in the sudden glimpses into the life of the animals that here make their home. You see the deep, hollowed-out passages down to the river that tell of the coming and going of the hippopotamus and rhinoceros, made use of also by the crocodiles. It is with a shock of surprise that you see a specimen of our

own great red deer come hither at midday to quench his thirst—a splendid figure, considerably bigger and stronger than he is to be seen elsewhere. A herd of wallowing wart-hogs or river-swine will sometimes startle you into hasty retreat before you realise what they are. The tree-tops rock under the weight and motion of apes unceasingly scurrying from branch to branch. Every now and again the eye is caught by the sight of groups of crocodiles, now basking contentedly in the sun, now betaking themselves again to the water in that stealthy, sinister, gliding way of theirs.

Not so long ago the African traveller found such scenes as these along the banks of every river. Nowadays, too many have been shorn of all these marvels. Take, for instance, the old descriptions of the Orange River and of the animal life met with along its course. No trace of it now remains.

I should like to give a picture of the animal life still extant along the banks of the Pangani. The time is inevitably approaching when that, too, will be a thing of the past, for it is not to be supposed that advancing civilisation will prove less destructive here.

So recently as the year 1896 the course of the river was for the most part unknown. When I followed it for the second time in 1897, and when in subsequent years I explored both its banks for great distances, people were still so much in the dark about it that several expeditions were sent out to discover whether it was navigable.

That it was not navigable I myself had long known. Its numerous rapids are impracticable for boats even in the

C. G. Schillings, phot.

A FISHERMAN'S BAG! THREE CROCODILES SECURED BY THE AUTHOR IN THE WAY DESCRIBED IN "WITH FLASHLIGHT AND RIFLE."

rainy season. In the dry season they present insuperable obstacles to navigation of any kind.

The basin of the Djipe Lake in the upper reaches of the Pangani, and the Pangani swamps below its lower reaches, formed a kind of natural preserve for every variety of the marvellous fauna of East Africa. It was a veritable El Dorado for the European sportsman, but one attended by all kinds of perils and difficulties. The explorer found manifold compensation, however, for everything in the unexampled opportunities afforded him for the study of wild life in the midst of these tifling marshes and lagoons. The experience of listening night after night to the myriad voices of the wilderness is beyond description.

Hippopotami were extraordinarily numerous at one time in the comparatively small basin of the Djipe Lake. In all my long sojourn by the banks of the Pangani I only killed two, and I never again went after any. There were such numbers, however, round Djipe Lake ten years ago that you often saw dozens of them together at one time. I fear that by now they have been nearly exterminated.

Here, as everywhere else, the natives have levied but a small tribute upon the numbers of the wild animals, a tribute in keeping with the nature of their primitive weapons. Elephants used regularly to make their way down to the water-side from the Kilimanjaro woods. My old friend Nguruman, the Ndorobo chieftain, used to lie in wait for them, with his followers, concealed in the dense woods along the river. But the time came when the elephants ceased to make their appearance. The old hunter, whose body bore signs of many an encounter

with lions as well as elephants, and who used often to hold forth to me beside camp fires on the subject of these adventures, could not make out why his eagerly coveted quarry had become so scarce. Every other species of "big game" was well represented, however, and according to the time of the year I enjoyed ever fresh opportunities for observation. Generally speaking, it would be a case of watching one aspect of wild life one day and another all the next, but now and again my eyes and ears would be surfeited and bewildered by its manifestations. The sketch-plans on which I used to record my day's doings and seeings serve now to recall to me all the multiform experiences that fell to my lot. What a pity it is that the old explorers of South Africa have left no such memoranda behind them for our benefit! They would enable us to form a better idea of things than we can derive from any kind of pictures or descriptions.

I shall try now to give some notion of all the different sights I would sometimes come upon in a single day. It would often happen that, as I was making my way down the Pangani in my light folding craft, or else was setting out for the velt which generally lay beyond its girdle of brushwood, showers of rain would have drawn herds of elephants down from the mountains.[1] Even when I did not actually come within sight of them, it was always an intense enjoyment

[1] Male Emperor-moths (*Saturnia pyri*) hasten from great distances, even against the wind, to a female of the species emerging from the chrysalis state in captivity. Elephants, the author believes, can scent a fall of rain at a distance of many miles.

C. G. Schillings, phot.

CLATTER-BILLS SETTLING UPON THE BARE BRANCHES OF RIVERSIDE TREES.

G. Schillings, phot.

CLATTER-BILLS (*ANASTOMUS LAMELLIGERUS*, Tem.).

to me to trace the immense footsteps of these nocturnal visitors. Perhaps the cunning animals would have already put several miles between my camp and their momentary stopping place. But their tracks afforded me always most interesting clues to their habits, all the more valuable by reason of the rare chances one has of observing them in daylight, when they almost always hide away in impenetrable thickets. What excitement there is in the stifled cry "Tembo!" In a moment your own eye perceives the unmistakable traces of the giant's progress. The next thing to do is to examine into the tracks and ascertain as far as possible the number, age and sex of the animals. Then you follow them up, though generally, as I have said, in vain.

The hunter, however, who without real hope of overtaking the elephants themselves yet persists in following up their tracks just because they have so much to tell him, will be all the readier to turn aside presently, enticed in another direction by the scarcely less notable traces of a herd of buffaloes. Follow these now and you will soon discover that they too have found safety, having made their way into an impenetrable morass. To make sure of this you must perhaps clamber up a thorny old mimosa tree, all alive with ants—not a very comfortable method of getting a bird's-eye view. Numbers of snow-white ox-peckers flying about over one particular point in the great wilderness of reeds and rushes betray the spot in which the buffaloes have taken refuge.

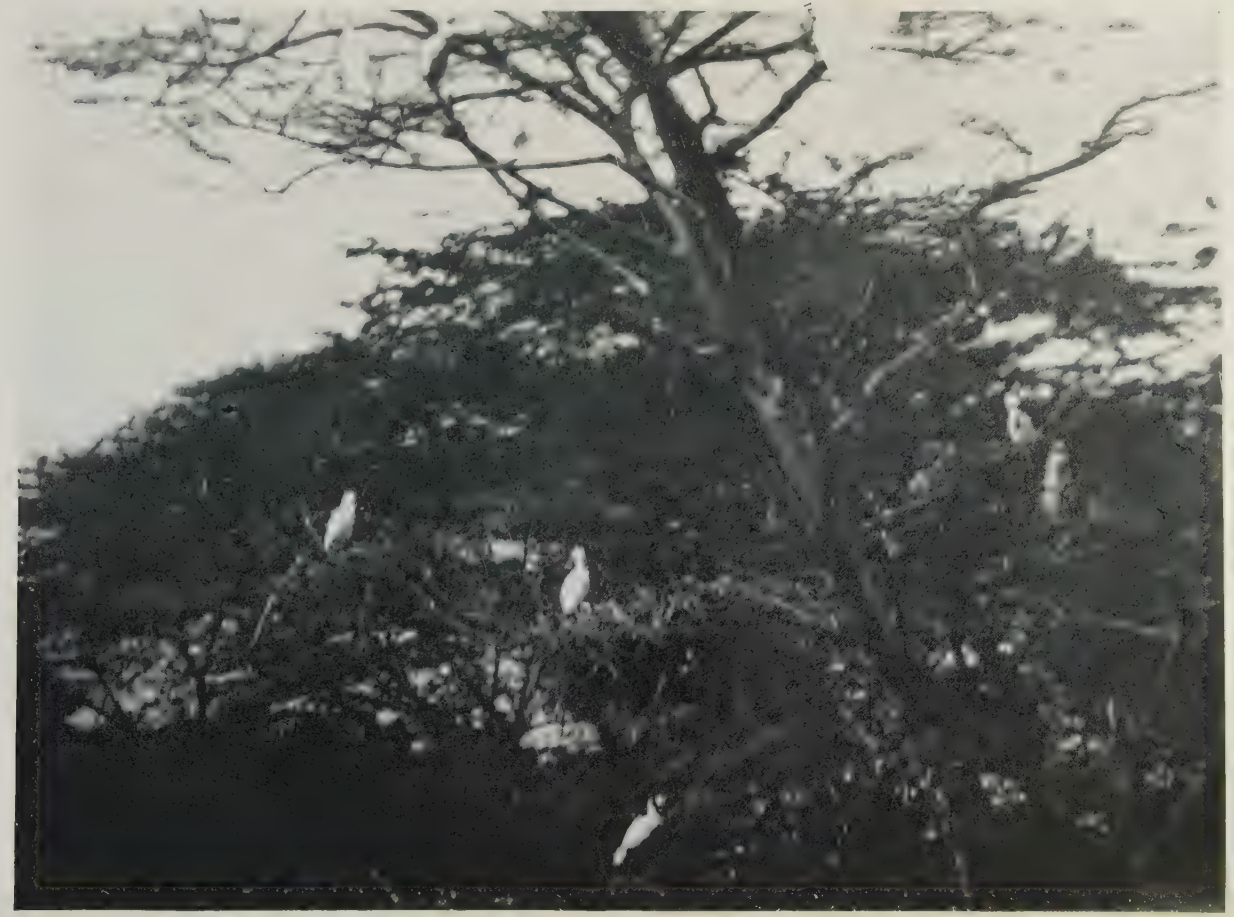
The great green expanse stretches out before you monotonously, and even in the bright sunlight you can see

no other sign of the animal life of various kinds concealed beneath the sea of rushes waving gently in the breeze. Myriads of insects, especially mosquitoes and ixodides, attack the invaders; the animals are few that do not fight shy of these morasses. They are the province of the elephants, which here enjoy complete security; of the hippopotami, whose mighty voice often resounds over them by day as by night; of the buffaloes, which wallow in the mud and pools of water to escape from their enemies the gadflies; and finally of the waterbuck, which are also able to make their way through even the deeper regions of the swamp. Wart-hogs also—the African equivalent of our own wild boars—contrive to penetrate into these regions, so inhospitable to mankind. We shall find no other representatives, however, of the big game of Africa. It is only in Central Africa and in the west that certain species of antelope frequent the swamps. In the daytime the elephant and the buffalo are seldom actually to be seen in them, nor does one often catch sight of the hippopotami, though they are so numerous and their voices are to be heard. As we grope through the borders of the swamp, curlew (*Glareola fusca*, L.) flying hither and thither all around us, we are startled ever and anon by a sudden rush of bush and reed buck plunging out from their resting-places and speeding away from us for their life. Even when quite small antelopes are thus started up by the sound of our advance, so violent is their flight that for the moment we imagine that we have to deal with some huge and perhaps dangerous beast.

In those spots where large pools, adorned with wonderful

C. G. Schillings, phot.

A MARSHLAND VIEW. AN OSPREY IN AMONG THE REEDS—THE BIRD FOR ...OTECTION QUEEN ALEXANDRA OF ENGLAND HAS LATELY PLEADED.



C. G Schillings, phot.

SNOW-WHITE HERONS MADE THEIR NESTS IN THE ACACIAS NEAR MY CAMP AND SHOWED NO MARKED TIMIDITY.

A SINGLE PAIR OF CRESTED CRANES WERE OFTEN TO BE SEEN NEAR MY CAMP.

A SNAKE-VULTURE. I SUCCEEDED TWICE ONLY IN SECURING A PHOTOGRAPH OF THIS BIRD.

C. G. Schillings, phot.

PREPARING TO SKIN A HIPPOPOTAMUS. THE PRESERVATION OF THE HIDE OF THIS SPECIMEN PROVED UNSUCCESSFUL. IT IS ALMOST IMPOSSIBLE TO PRESERVE HIPPOPOTAMUS-HIDES WITHOUT HUGE QUANTITIES OF ALUM AND SALT, BOTH VERY HARD TO GET IN THE INTERIOR OF AFRICA. THE SKIN OF THE HEAD IS THINNER AND MORE MANAGEABLE THAN THAT OF THE REST OF THE BODY.

C. G. Schillings, phot.

HIPPOPOTAMI, POPPING THEIR HEADS OR EARS AND SNOUTS UP ABOVE THE SURFACE OF THE WATER.

water-lilies, give a kind of symmetry to the wilderness, we come upon such a wealth of bird-life as enables us to form some notion of what this may have been in Europe long ago under similar conditions. The splendid great white heron (*Herodias alba*, L., and *garzetta*, L.) and great flocks of the active little cow-herons (*Bubulcus ibis*, L.) make their appearance in company with sacred ibises and form a splendid picture in the landscape. Some species of those birds with their snow-white feathers stand out picturesquely against the rich green vegetation of the swamp. When, startled by our approach, these birds take to flight, and the whole air is filled by them and by the curlews (*Glareola fusca*, L.) that have hovered over us, keeping up continually their soft call, when in every direction we see all the swarms of other birds—sea-swallows (*Gelochelidon nilotica*, Hasselq.), lapwings, plovers (*Charadriidæ*), Egyptian geese, herons, pelicans, crested cranes and storks—the effect upon our eyes and ears is almost overpowering.

How mortal lives are intertwined and interwoven! The ox-peckers swarm round the buffaloes and protect them from their pests, the ticks and other parasites. The small species of marsh-fowl rely upon the warning cry of the Egyptian geese or on the sharpness of the herons, ever on the alert and signalling always the lightning-like approach of their enemy the falcons (*Falco biarmicus*, Tem., and *F. minor*, Bp.). All alike have sense enough to steer clear of the crocodiles, which have to look to fish chiefly for their nourishment, like almost all the frequenters of these marshy regions.

The quantities of fish I have found in every pool in these swamps defy description—I am anxious to insist upon this point—and this although almost all the countless birds depend on them chiefly for their food. Busy beaks and bills ravage every pool and the whole surface of the lagoon-like swamp for young fish and fry. The herons and darters (*Assingha rufa*, Lacèp. Daud.) manage even to do some successful fishing in the deeper waters of the river. *And yet, in spite of all these fish-eaters, the river harbours almost a superabundance of fish.*[1]

Wandering along by the river, we take in all these impressions. For experiences of quite another kind, we have only to make for the neighbouring velt, now arid again and barren, and thence to ascend the steep ridges leading up to the tableland of Nyíka.

Behind us we leave the marshy region of the river and the morass of reeds. Before us rises Nyíka, crudely yellow, and the laterite earth of the velt glowing red under the blazing sun. The contrast is strong between the watery wilderness from which we have emerged and these higher ranges of the velt with their strange vegetation. Here we shall find many species of animals that we should look for in vain down there below, animals that live differently and on scanty food up here, even in the dry season. The buffaloes also know where to go for fresh young grass even when they are in the marshes, and they reject the ripened green grass. The dwellers on the velt are only to be found amidst the lush vegetation of the

[1] The author would like to bring this fact home to all destroyers of herons, kingfishers, and diving-birds.

C. G. Schillings, *phot.*

HEAD OF A HIPPOPOTAMUS (*HIPPOPOTAMUS AFR. ABYSSINICUS*, Less.) WHICH I ENCOUNTERED ON DRY LAND AND WHICH NEARLY "DID" FOR ME.

C. G. Schillings, phot.

MY OLD FRIEND "NGURUMAN," A WANDOROBO CHIEF. HIS BODY IS SEARED BY MANY SCARS THAT TELL OF ENCOUNTERS WITH ELEPHANTS AND LIONS.

valley at night time, when they make their way down to the river-side to drink.[1] It is hard to realise, but they find all the food they need on the high velt. When you examine the stomachs of wild animals that you have killed, you note with wonder the amount of fresh grass and nourishing shrubs they have found to eat in what seem the barrenest districts. The natives of these parts show the same kind of resourcefulness. The Masai, for instance, succeeds most wonderfully in providing for the needs of his herds in regions which the European would call a desert. I doubt whether the European could ever acquire this gift. Out here on the velt we shall catch sight of small herds of waterbuck, never to be seen in the marshes. We shall see at midday, under the bare-looking trees, herds of Grant's gazelles too, and the oryx antelope. Herds of gnus, going through with the strangest antics as they make off in flight, are another feature in the picture, while the fresh tracks of giraffes, eland, and ostriches tell of the presence of all these. Wart-hogs, a herd of zebras in the distance—like a splash of black—two ostrich hens, and a multitude of small game and birds of all descriptions add to the variety. But what delights the ornithologist's eye more than anything is the charming sight of a golden yellow bird, now mating. Up it flies into the sky from the tree-top, soon to come down again with wings and tail outstretched, recalling our own singing birds. You would almost fancy it was a canary.

[1] The Masai distinguish the kinds of grass which their cattle eat and reject. Many kinds of grass with pungent grains, such as *Andropogon contortus*, L., are rejected entirely. Yet the tough bow-string hemp is to the taste of many wild animals—the small kudu, for instance.

Only in this one region of the velt have I come upon this exquisite bird (*Tmetothylacus tenellus*, Cal.), nowhere else

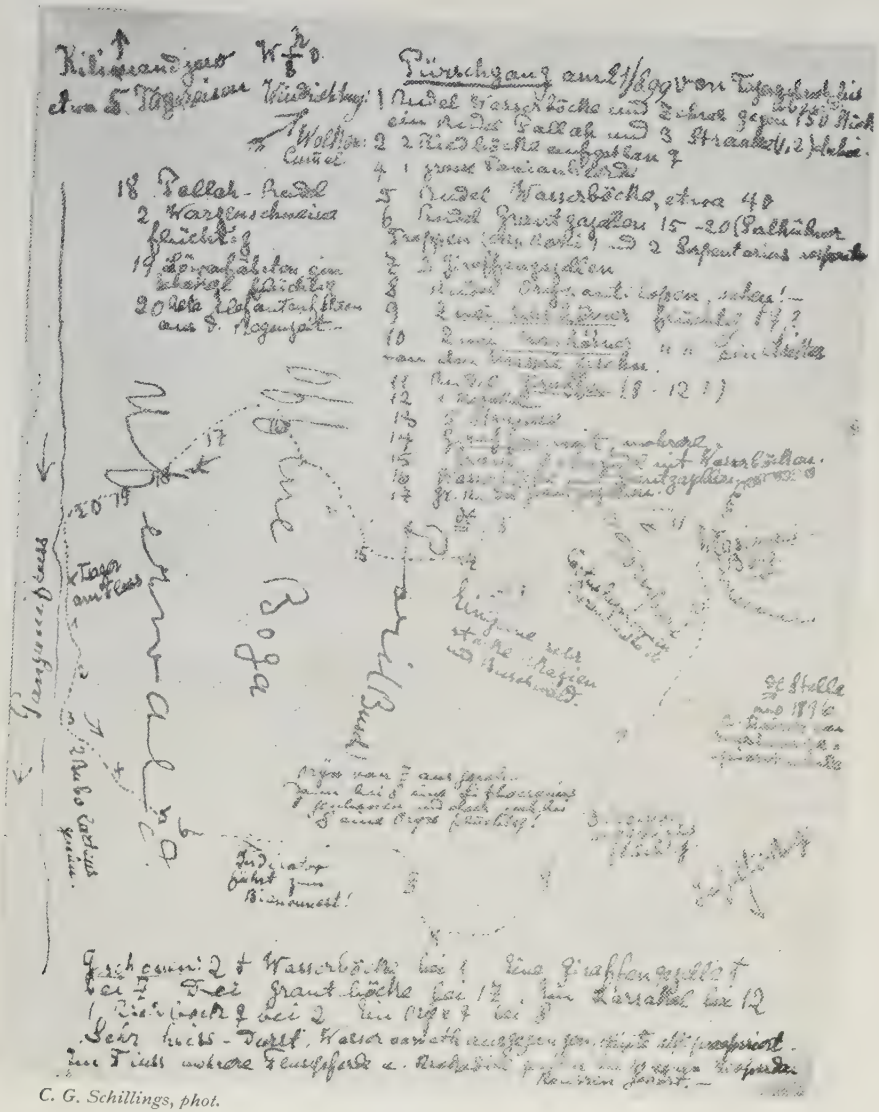
Thus would I spend day after day, getting to know almost all the wild denizens of East Africa, either by seeing them in the flesh or by studying their tracks and traces, cherishing more and more the wish to be able to achieve some record of all these beautiful phases of wild life. I repeat: as a rule you will carry away with you but one or another memory from your too brief day's wandering, but there come days when a succession of marvellous pictures seem to be unrolled before your gaze, as in an endless panorama. It is the experience of one such day that I have tried here to place on record. Professor Moebius is right in what he says: "Æsthetic views of animals are based not upon knowledge of the physiological causes of their forms, colouring, and methods of motion, but upon the impression made upon the observer by their various features and outward characteristics as parts of a harmonious whole. The more the parts combine to effect this unity and harmony, the more beautiful the animal seems to us." Similarly, a landscape seems to me most impressive and harmonious when it retains all its original elements. No section of its flora or fauna can be removed without disturbing the harmony of the whole.

Within a few years, if this be not actually the case already, all that I have here described so fully will no longer be in existence along the banks of the Pangani. When I myself first saw these things, often my thoughts went back to those distant ages when in the lands now known as Germany the same description of wild life was

EGYPTIAN GEESE.

C. G. Schillings, phot.

A WOUNDED BUFFALO.



C. G. Schillings, phot.

FACSIMILE REPRODUCTION OF ONE OF MY HUNTING RECORD-CARDS, ENUMERATING ALL THE DIFFERENT ANIMALS I SIGHTED ONE DAY (AUGUST 21, 1898) IN THE COURSE OF AN EXPEDITION IN THE VICINITY OF THE MASIMANI HILLS, HALF-WAY UP THE PANGANI RIVER. THE DOTTED LINE SHOWS MY ROUTE AND THE NUMBERS INDICATE THE SPOTS AT WHICH I CAME UPON THE VARIOUS SPECIES OF GAME. AT ANOTHER TIME OF THE YEAR THIS DISTRICT WOULD BE ENTIRELY DESTITUTE OF WILD LIFE.

extant in the river valleys, when hippopotami made their home in the Rhine and Main, and elephants and rhinoceroses still flourished. . . . What I saw there before me in the flesh I learnt to see with my mind's eye in the long-forgotten past. It is the duty of any one whose good fortune it has been to witness such scenes of charm and loveliness to endeavour to leave some record of them as best he may, and by whatever means he has at his command.

A SEA-GULL.

A MASAI THROWING HIS SPEAR.

IX

After Elephants with Wandorobo

"BIG game hunting is a fine education!" With this opinion of Mr. H. A. Bryden I am in entire agreement, but I cannot assent to the dictum so often cited some of the most experienced African hunters, to the hat Equatorial East Africa offers the sportsman no e compensation for all the difficulties and dangers here to be faced.

I cannot subscribe to this view, because to my mind these very difficulties and dangers impart to the sport of this region a fascination scarcely to be equalled in any other part of the world. It is only in tropical Africa that you will find the last splendid specimens of an order of wild creation surviving from other eras of the earth's history. It is not to be denied that you must pay a high price for the joy of hunting them. That goes without

C. G. Schillings, phot.

A POWERFUL OLD HIPPOPOTAMUS ON HIS WAY TO HIS HAUNT IN THE SWAMP AT DAYBREAK.
ONE OF MY BEST PHOTOGRAPHS.

saying in a country where your every requisite, great and small, has to be carried on men's shoulders—no other form of transport being available—from the moment you set foot within the wilderness. I am not now talking of quite short expeditions, but of the bigger enterprises which take the traveller into the interior for a period of months. I hold that this breaking away from all the resources of civilised life should be one of the sportsman's chief incentives, and one of his chief enjoyments. I can, of course, quite understand experienced hunters taking another view. Many have had such serious encounters with the big game they have shot, and above all such unfortunate experiences of African climates, that they may well have had enough of such drawbacks.

Their assertions, in any case, tend to make it clear that sport in this East African wilderness is no child's play. In reality, all depends upon the character and equipment of the man who goes in for it. The apparently difficult game of tennis presents no difficulties to the expert tennis-player. With an inferior player it is otherwise. So it is in regard to hunting in the tropics. It is obvious that experience in sport here at home is of the greatest possible use out there—is, in fact, absolutely essential to one's success. Only those should attempt it who are prepared to do everything and cope with all obstacles for themselves, who do not need to rely on others, and whose nerves are proof against the extraordinary excitements and strains which out there are your daily experience.

I myself am conscious of a steadily increasing distaste for face-to-face encounters with rhinoceroses, and with

elephants still more. There are indeed other denizens of the East African jungle whose defensive and offensive capabilities it would be no less a mistake to under estimate. The most experienced and most authoritative Anglo-Saxon sportsmen are, in fact, agreed that, whether it be a question of going after lions or leopards or African buffaloes, sooner or later the luck goes against the hunter. Of recent years a large number of good shots have lost their lives in Africa. If one of these animals once gets at you, you are as good as dead. To be chased by an African elephant is as exciting a sensation as a man could wish for. The fierceness of his on-rush passes description. He makes for you suddenly, unexpectedly. The overpowering proportions of the enraged beast—the grotesque aspect of his immense flapping ears, which make his huge head look more formidable than ever—the incredible pace at which he thunders along—all combine with his shrill trumpeting to produce an effect upon the mind of the hunter, now turned quarry, which he will never shake himself rid of as long as life lasts. When—as happened once to me—it is a case not of one single elephant, but of an entire herd giving chase in the open plain (as described in *With Flashlight and Rifle*), the reader will have no difficulty in understanding that even now I sometimes live the whole situation over again in my dreams and that I have more than once awoke from them in a frenzy of terror.

Of course, a man becomes hardened in regard to hunting accidents in course of time, especially if all his adventures have had fortunate issues. When, however, a man has repeatedly escaped destruction by a hair's-breadth only, and

ORYX ANTELOPE BULL, NOT YET AWARE OF MY APPROACH.

A HERD OF ORYX ANTELOPES (*ORIX CALLOTIS*, Thos.), CALLED BY THE COAST-FOLK "CHIROA."

WATERBUCK. THEY SOMETIMES LOOK QUITE BLACK, AS THIS PHOTOGRAPH SUGGESTS. IT DEPENDS UPON THE LIGHT.

HEAD OF A BULL WATERBUCK (*COBUS ELLIPSIPRYMNUS*, Ogilb.).

when incidents of this kind have been heaped up one on another within a brief space of time, the effects upon the nervous system become so great that even with the utmost self-mastery a man ceases to be able to bear them. As I have already said, the total number of casualties in the ranks of African sportsmen is not inconsiderable.

In Germany, of course, we have time-honoured sports of a dangerous nature too, but these are exceptions—for instance, killing the wild boar with a spear, and mountain-climbing and stalking.

In order to understand fully the mental condition of the sportsman in dangerous circumstances such as I have described, it is necessary to realise the way in which he is affected by his loneliness, his complete severance from the rest of mankind. There is all the difference in the world between the situation of a number of men taking up a post of danger side by side, and that of the man who stands by himself, either at the call of duty or impelled by a sense of daring. He has to struggle with thoughts and fears against which the others are sustained by mutual example and encouragement.

But, as I have said, the great fascination of sport in the tropics lies precisely in the dangers attached. Therein, too, lies the source of that pluck and vigour which the sport-hardened Boers displayed in their struggles with the English. The perils they had faced in their pursuit of big game had made brave men of them.

Now let us set out in company with the most expert hunters of the velt on an expedition of a rather special

kind—the most dangerous you can go in for in this part of the world—an elephant-hunt. In prehistoric days the mammoth was hunted with bow and arrow in almost the same fashion as the elephant is to-day by certain tribes of natives. Taking part in one of their expeditions, one feels it easy to go back in imagination to the early eras of mankind. This feeling imparts a peculiar fascination to the experience.

After a good deal of trouble I had got into friendly relations with some of these nomadic hunters. It was a difficult matter, because they fight shy of Europeans and of the natives from the coast, such as my bearers and followers generally. I knew, moreover, that our friendship might be of short duration, for these distrustful children of the velt might disappear at any moment, leaving not a trace behind them. However, I had at least succeeded, by promises of rich rewards in the shape of iron and brass wire, in winning their goodwill. After many days of negotiation they told me that elephants might very likely be met with shortly in a certain distant part of the velt. The region in question was impracticable for a large caravan. Water is very scarce there, rock pools affording only enough for a few men, and only for a short time. At this period of the year the animals had either to make incredibly long journeys to their drinking-places, or else content themselves with the fresh succulent grass sprouting up after the rains, and with the moisture in the young leaves of the trees and bushes.

I set out one day in the early morning for this locality with a few of my men in company with the Wandorobo.

C. G. Schillings, phot.

MY WANDOROBO GUIDES ON THE MARCH, WITH ALL THEIR "HOUSEHOLD FURNITURE" ON THEIR BACKS!

C. G. Schillings, phot.

A PARTY OF WANDOROBO HUNTERS COMING TO MY CAMP. I GOT SEVERAL OF THEM TO ACT FOR ME AS GUIDES.

After a long and fatiguing march in the heat of the sun, we encamp in the evening at one of the watering-places. To-day, to my surprise, there is quite a large supply of water, owing to rain last night. The elephants, with their unfailing instinct, have discovered the precious liquid. They have not merely drunk in the pool, but have also enjoyed a bath; their tracks and the colour and condition of the water show that clearly. Therefore we do not pitch our camp near the pool, but out in the velt at some distance away, so as not to interfere with the elephants in case they should be moved to return to the water.

But the wily beasts do not come a second time, and we are obliged to await morning to follow their tracks in the hope of luck. The Wandorobo on ahead, I and two of my men following, make up the small caravan, while some of my other followers remain behind at the watering-place in a rough camp. I have provided myself with all essentials for two or three days, including a supply of water contained in double-lined water-tight sacks. For hour after hour we follow the tracks clearly defined upon the still damp surface of the velt. Presently they lead us through endless stretches of shrubs and acacia bushes and bow-string hemp, then through the dried-up beds of rain-pools now sprouting here and there with luxuriant vegetation. Then again we come to stretches of scorched grass, featureless save for the footsteps of the elephants. As we advance I am enabled to note how the animals feed themselves in this desert-like region, from which they never wander any great distance. Here, stamping with their mighty feet, they have smashed some young tree-trunks

and shorn them of their twigs and branches; and there, with their trunks and tusks, they have torn the bark off larger trees in long strips or wider slices and consumed them. I observe, too, that they have torn the long sword-shaped hemp-stalks out of the ground, and after chewing them have dropped the fibres gleaming white where they lie in the sun. The sap in this plant is clearly food as well as drink to them. I see, too, that at certain points the elephants have gathered together for a while under an acacia tree, and have broken and devoured all its lower branches and twigs. At other places it is clear that they have made a longer halt, from the way in which the vegetation all around has been reduced to nothing. We go on and on, the mighty footsteps keeping us absorbed and excited. We know that the chances are all against our overtaking the elephants, but the pleasures of the chase are enough to keep up our zest. At any moment, perhaps, we may come up with our gigantic fugitives. Perhaps!

How different is the elephant's case in Africa from what it is in India and Ceylon! In India it is almost a sacred animal; in Ceylon it is carefully guarded, and there is no uncertainty as to the way in which it will be killed. Here in Africa, however, its lot is to be the most sought-after big game on the face of the earth; but the hunter has to remember that he may be "hoist with his own petard," for the elephant is ready for the fray and knows what awaits him. With these thoughts in my mind and the way clearer at every step, the Wandorobo move on and on unceasingly in front.

It is astonishing what a small supply of arms and

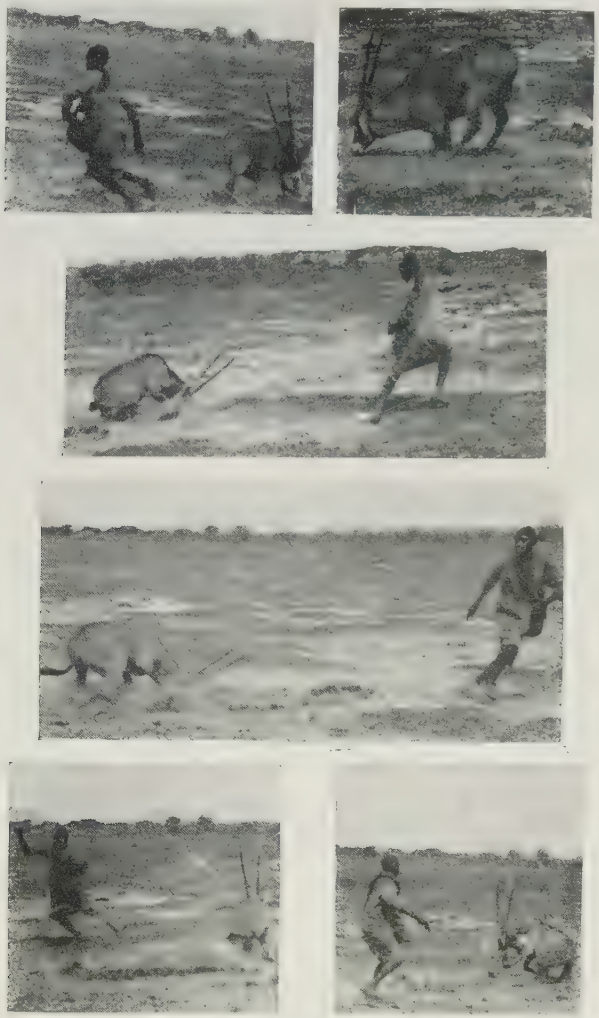
C. G. Schillings, phot.

A FEAST OF HONEY. A HONEY-FINDER HAD LED US TO A HIVE, AND HERE MY MEN MAY BE SEEN REJOICING IN THE RESULTS.

C. G. Schillings, phot

ACACIA TREE DENUDED BY ELEPHANTS.

utensils these sons of the velt take with them when starting out for journeys over Nyíka that may take weeks



AN ORYX ANTELOPE'S METHODS OF DEFENCE.

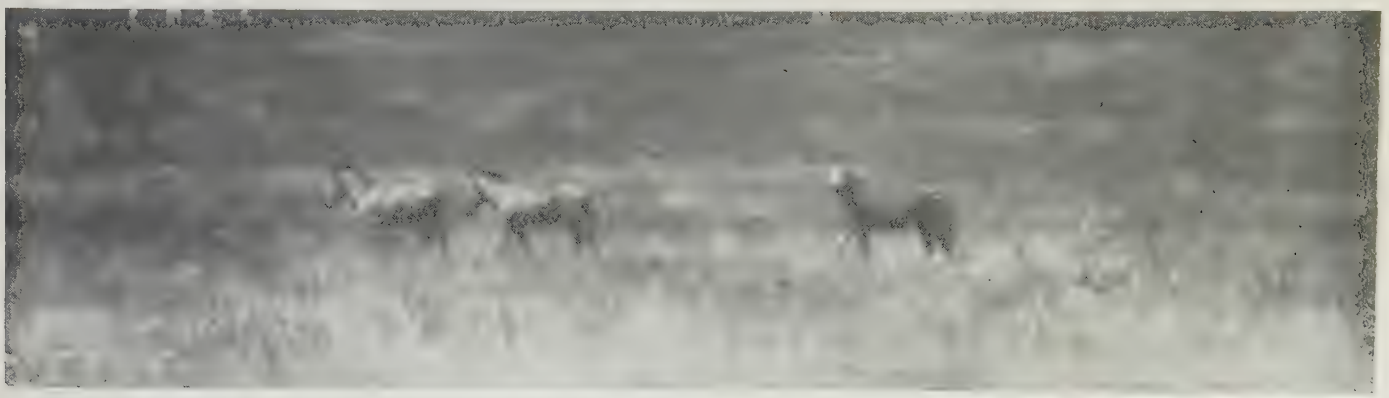
or months. Round their shoulders they carry a soft dressed skin, and, hung obliquely, a strap to which a

few implements are attached, as well as a leathern pouch containing odds and ends. Their bow they hold in one hand, while their quivers, filled with poisoned arrows, are also fastened to their shoulders by a strap. In addition they carry a sword in a primitive kind of scabbard. Thus equipped they are ready to cope with all the dangers and

A DWARF KUDU (*STREPSICEROS IMBERBIS*, Blyth). I HAVE NEVER YET SUCCEEDED IN PHOTOGRAPHING THIS ANIMAL ALIVE AND IN FREEDOM. SO FAR I HAVE BEEN ABLE TO PHOTOGRAPH ONLY SPECIMENS WHICH I HAVE SHOT.

discomforts of the velt, and succeed somehow in coming out of them victorious.

How thoroughly the velt is known to them—every corner of it! To live on the velt for any time you must be adapted by nature to its conditions. We Europeans should find it as hard to become acclimatised to it as the



ZEBRAS.

C. G. Schillings, phot.

GIRAFFE STUDIES (*GIRAFFA SCHILLINGSI,* Mtsch.) SECURED BY TELEPHOTO-LENS.

ZEBRAS (*EQUUS BOHMI*) OUT ON THE OPEN VELT.

C. G. Schillings, phot.

MY MASAI DONKEYS ARRIVING IN CAMP, ESCORTED BY ARMED MEN. BEARERS ADVANCING TO MEET THEM AND TO UNBURDEN THEM OF THEIR LOADS.

Wandorobo would to the conditions of civilised life in Europe. The one thing they are like us in being unable to forego is water—and even that they can do without for longer than we can. The most important factor in their life as hunters is their knowledge where to get water at the different periods of the year. Their intimate acquaintance with the book of the velt is something beyond our faculty for reading print. Our experiences in our recent campaigns in South-West Africa have served to bring home the wonderful way in which the natives decipher and interpret the minutest indications to be found in the ground of the velt and know how to shape their course in accordance with them.

This had already been brought home to me in the regions through which I had travelled. You must have had the experience yourself to realise the degree to which civilised man has unlearnt the use of his eyes and ears. Whether it be a question of finding one's bearings or deciding in which direction to go, or of sizing up the elephant-herds from their tracks, or of distinguishing the tracks of one kind of antelope from those of another, or of detecting some faint trace of blood telling us that some animal we are after has been wounded, or of knowing where and when we shall come to some water, or of discovering a bee's nest with honey in it—in all such matters the native is as clever as we are stupid. We may make some progress in this kind of knowledge and capability, but we shall always be a bad second to the native-born hunter of the velt.

With such men to act as your guides you get to feel

that traversing Nyíka is as safe as mountain-climbing under the guidance of skilled mountaineers. You get to feel that you cannot lose your way or get into difficulties about water. One reflection, however, should never be quite absent from your mind—that at any moment these guides of yours may abandon you. That misfortune has never happened to me, and it is not likely to happen when the natives are properly handled. Moreover, your friendship with them can sometimes be strengthened by the establishment of bonds of brotherhood. A time-honoured practice of this kind, held sacred by the natives, can be of the greatest benefit. I am strongly in favour of the observance of these praiseworthy native customs, and have always been most ready to go through with the ceremonies involved.

I endeavour to win the goodwill of my guides by keeping to the pace they set—an easy matter for me. In every other way also I take pains to fall in with the ways and habits of the Wandorobo, so as to attenuate that feeling of antagonism which my uncivilised friends necessarily harbour towards the European. I owe it to this, perhaps, that they did their utmost to find the elephant-tracks for me.

For hour after hour we continue our march, in and out, over velt and brushwood, coming every few hours to a watering-place, and meeting in the hollow of one valley an exceptionally large herd of oryx antelopes. Under cover of the brushwood, and favoured by the wind, I succeed in getting quite near this herd and thus in studying their movements close at hand.

C. G. Schillings, phot.

PEARL-HENS ON AN ACACIA TREE.

C. G. Schillings, phot.

A PAIR OF GRANT'S GAZELLES TAKING TO FLIGHT.

[p. 398

In the bush, not far from these oryx antelopes, I come unexpectedly on a small herd of beautiful dwarf kudus. They take to flight, but reappear for a moment in a glade. This kind of sudden glimpse of these timid, pretty creatures is a real delight to one. Their great anxious eyes gaze inquiringly at the intruder, while their large ears stand forward in a way that gives a most curious aspect to their shapely heads. The colouring of their bodies accords in a most remarkable degree with their environment, and this accentuates the individuality of their heads, seen thus by the hunter. Off they scamper again now, in a series of extraordinarily long and high jumps, gathering speed as they go, and unexpectedly darting now in one direction, now in another. It is very exciting work tracking the fugitive kudu, and when it is a question of a single specimen you may very well mark it down in the end; but according to my own experience it is next to impossible to follow up a herd, for one animal after another breaks away from it, seeking safety on its own account.

Now we come again to an open grassy stretch of velt. With a sudden clatter of hoofs a herd of some thirty zebras some hundred paces off take to flight and escape unhurt by us into the security of a distant thicket. The older animals and the leaders of the herd keep looking backwards anxiously with outstretched necks. Even in the thicket their bright colouring makes them discernible at this hour of the day. But our attention is distracted now elsewhere. Far away on the horizon appear the unique outlines of a herd of giraffes. The

timorous animals have noted our approach and are already making away—stopping at moments to glance at us—into a dense thorn-thicket. The wind favours us, so I quickly decide to make a detour to the right and cut them off. After a breathless run through the brushwood I succeed in getting within a few paces of one of the old members of the herd. This way of circumventing a herd of giraffes—my followers helping me by moving about all over the place, so as to put them off the scent—has not often proved successful with me, because it can only be managed when both wind and the formation of the country are in one's favour.

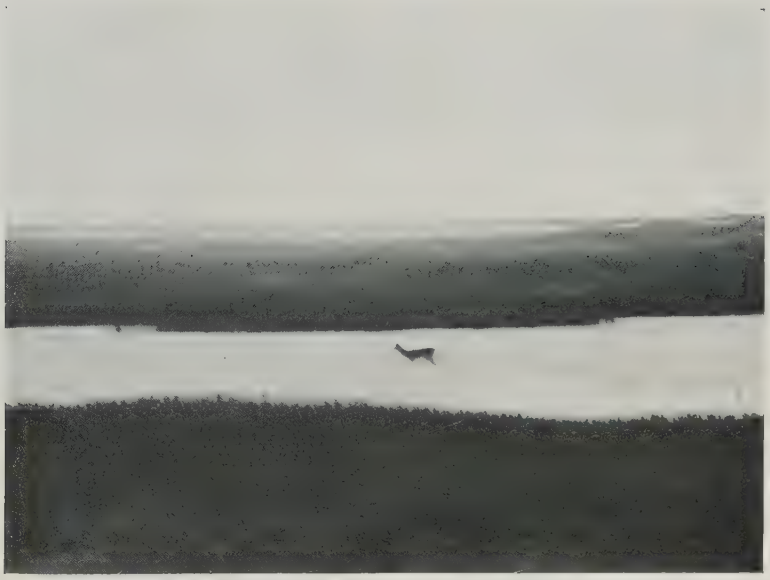
To-day I have no mind to kill the beautiful long-limbed beast, but it is delightful to get into such close touch with him. Now he is off, stepping out again, swinging his long tail, his immense neck dipping and rising like the mast of a sea-tossed ship, and the rest of the herd with him.

Now, just because I have no thought of hunting, every kind of wild animal crosses my path! Their number and variety are beyond belief. We come upon more zebras, oryx antelopes, hartebeests, Grant's gazelles, impalla antelopes; upon ostriches, guinea-fowl (*Numida reichenowi* and *Acryllium vulturinum*, Hardw.), and francolins. The recent rains seem to have conjured them all into existence here as though by magic.

But everything else has to give precedence to the elephant-tracks, which now are all mixed up, though leading clearly to the next watering-place, towards which we are directing our steps down a way trodden quite

GRANT'S GAZELLES.

A GOOD INSTANCE OF PROTECTIVE COLOURING. A HERD OF GRANT'S GAZELLES ALMOST INDISTINGUISHABLE FROM THEIR BACKGROUND OF THORN-BUSH.



A GRANT'S GAZELLE BUCK STANDING OUT CONSPICUOUSLY ON THE DRIED-UP BED OF A LAKE NOW SO INCRUSTATED WITH SALT AS TO LOOK AS THOUGH SNOW-COVERED.

FOUR GRANT'S GAZELLES.

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hard by animals, evidently during the last few days. Large numbers of rhinoceroses have trampled down this way to the water, but neither they nor the elephants are to be seen in the neighbourhood while the sun is up. They are too well acquainted with the habits of their enemy man, and they keep at a safe distance out on the velt. To-day, therefore, I am to catch no glimpse of either elephant or rhinoceros. Wherever I turn my eyes, however, I see other animals of all sorts—among others, some more big giraffes. I am not to be put off, however, and I decide to follow up the tracks of a number of the elephants, evidently males, giving myself up anew to the unfailing interest I find in the study of their ways, and confirming the observations I had already made as to their finding their chief nourishment on the velt in tree-bark and small branches.

Night set in more quickly than we expected while we were pitching camp before sunset in a cutting in a thorn-thicket. Spots on which fires had recently been lit showed us that native hunters had been there a few days before, and my guides said they must have been the Wakamba people, keen elephant-hunters, with whom they live at enmity, and of whose very deadly poisoned arrows they stand in great dread. Therefore we drew close round a very small camp-fire, carefully kept down. The glow of a big fire might have brought the Wakamba people down on us if they were anywhere in the neighbourhood. It seems that natives who are at war often attack each other in the dark. It may easily be imagined, then, that the first hours of our "night's repose" were

not as blissful as they should have been! After a time, however, our need of sleep prevailed, sheer physical fatigue overcame all our anxieties, and my Wandorobo slumbered in peace. They had contrived a "charm," and had set up a row of chewed twigs all round to keep off misfortune. Unfortunately it is not so easy for a European to believe in the efficacy of these precautions! It was interesting to observe that the Wandorobo evinced much greater fear of the poisoned arrows of the Wakamba than of wild animals. In view of my subsequent experience, I myself in such a situation would view the possibility of being attacked by elephants with much greater alarm.

As it happened, however, this night passed like many another—if not without danger, at least without mishap.

Day dawned. No bird-voices greeted it, for, strange to relate, we found nothing but big game in this wooded wilderness, save for guinea-fowl (*Numida reichenowi* and *Acryllium vulturinum*, Hardw.) and francolins. The small birds seem to have known that the water would soon be exhausted, and that until the advent of the next rainy season this was no place for them.

In the grey of early morning we made our way out again into the velt. We had to visit the neighbouring watering-places and then to follow up some fresh set of elephant-tracks. It turned out that some ten big bull-elephants had visited one of the pools, and had left what remained of the water a thick yellowish mud. They had rubbed and scoured themselves afterwards against a

C. G. Schillings, phot.

THE HERDS OF GRANT S GAZELLES ARE SOMETIMES MADE UP ENTIRELY OF MALES, SOMETIMES ENTIRELY OF FEMALES. IN THIS PICTURE WE SEE A NUMBER OF YOUNG DOES IN SEARCH OF THE SCANTY FRESH GRASS ON A PORTION OF THE VELT WHICH NOT LONG BEFORE HAD BEEN BURNT UP.

C. G. Schillings, phot.

A SMALL HERD OF GRANT'S GAZELLES. THE KILIMANJARO RANGE IN THE BACKGROUND.

clump of acacia trees. Judging from the marks upon these trees some of the elephants in this herd must have been more than eleven feet in height. With renewed zest we followed up the fresh, distinct tracks through the bush, through all their twistings and turnings. Again we came upon all kinds of other animals—among others,

YOUNG MASAI HARTEBEEST. I DID NOT SUCCEED IN MY EFFORTS TO BRING BACK A SPECIMEN OF THIS SPECIES.

a herd of giraffes right in our path. These were opportunities for the naturalist only, not for the sportsman who was keeping himself for the elephants and would not fire a shot at anything else unless in extreme danger. Later, at a moment when we believed ourselves to have got quite close to the elephants, I started an extraordinarily large land-tortoise—the biggest I have ever seen. I

could not get hold of it, however—I was too much taken up with the hope of reaching the elephants; but after several more hours of marching I had to call a halt in order to gather new strength. In the end we did not overtake them. They had evidently been seriously disquieted either by us or earlier by the Wakamba people. While we were pitching our camp in the evening, nearly a day's journey from our camp of the night before, we sighted one after another three herds of elands and four rhinoceroses on their way out into the velt to graze. During these two days I had come within shot of about ten rhinoceroses while on the march, and had caught glimpses of many more in the distance.

The third day's pursuit of the elephants also proved entirely fruitless. We did not even come within sight of a female specimen.

My guides were now of opinion that the animals must be so thoroughly alarmed that any further pursuit would be almost certainly in vain, so we made our way back as best we could in a zigzag course to my main camp, and reached it on the morning of the fourth day.

Most elephant-hunts in Equatorial Africa run on just such lines as these and with the same result, yet they are among the finest and most interesting experiences that any sportsman or naturalist can hope to have. The wealth of natural life that had been given to my eyes during those three days was simply overpowering. But if you have once succeeded in getting within range of an African elephant, all other kinds of wild animals seem small fry to you. You have the same kind of feeling that the German

CITY OF WESTMINSTER
PUBLIC

C. G. Schillings, phot.

A HERD OF HARTEBEESTS (*BUBALIS COKEI*, Gthr.).

HARTEBEESTS WITH YOUNG.

C. G. Schillings, phot.

WATERBUCK

sportsman has when after a *Brunft* stag—he cares for no other kind of game; he has no mind for anything but the stag. But the elephant fever attacks you out in Africa even more virulently than the stag fever here at home.

Yet it is fine to remember one's ordinary shooting expeditions in the tropics. You need some luck, of course—the velt is illimitable and the game scattered all over it. But if the rains have just ceased, if you have secured good guides, if you yourself are equal to facing all the hardships, then indeed it is a wonderful experience. There is no doubt about it—you have to be ready for a combination of every kind of strain and exertion. You can stand it for a day perhaps, or two or three, but you must then take a rest. The man who has gone through with this may venture on the experiment of pursuing elephants for several days together. He will, I think, bear me out in saying that until you have done that also you do not know the limits of endurance and fatigue.

The most glorious hour in the African sportsman's life is that in which he bags a bull-elephant. When he succeeds in bringing the animal down at close range in a thicket such as I have so often described, his heart beats with delight—it is just a chance in such cases what your fate may be. Wide as are the differences in the views ... by experienced travellers and by other writers in regard to African sport in general, they are all agreed that elephant-hunting is the most dangerous task a man can set himself. The hunting ... Indian or Ceylon elephants—save in the case of a ...e"—is not to be

compared with the African sport as I understand it. I do not mean the easy-going, pleasure-excursion kind of hunt ordinarily gone in for in the African bush, but a one-man expedition, in which the sportsman sets himself deliberately to bag his game single-handed. That, indeed, is my idea of how one should go after big game in such countries as Africa in all circumstances whatever.

Barely as many as a dozen elephants have fallen to my rifle. Some of these I killed in order to try and get hold of a young specimen which I might bring to Europe in good condition—a desire which I have long cherished, but which has not yet been fulfilled. Others I killed so that I might present them to our museums.

There were immense numbers of other bull-elephants that I might have shot, and that are probably now roaming the velt, but that I had to spare because I was more intent upon photographing them. My photographs are, however, ample compensation to me. While, too, it is pleasant to me to reflect that I have left untouched so many elephants that came within easy range, I hope, none the less, some day to bring down a specimen adorned with a really splendid pair of tusks. This is an aspiration not often realised by African sportsmen, even when they have been hunting for half a lifetime. Elephants with tusks weighing nearly five hundred pounds, like those in our illustration, are extremely rare—even in earlier times they were met with perhaps once in a hundred years.

The hunting of an African elephant, I repeat in conclusion, is a source of the greatest delight to the

C. G. Schillings, phot.

THE SKINNING OF AN ELEPHANT. THIS SPECIMEN IS NOW IN THE NATURAL HISTORY MUSEUM, BERLIN.

C. G. Schillings, phot.

PREPARING TO SKIN AN ELEPHANT.

sportsman, for even if he does not bag his game he is well rewarded for his pains by all the interest and excitement of the chase. But no one who has not himself gone through with it can estimate what it involves. Even with the most perfected equipment in regard to arms, it is often a matter of luck whether you kill the animal outright and on the spot.

An experience I had in the Berlin Zoological Gardens illustrates this. I was called in to dispatch a huge bull-elephant which had to be killed, and which had rejected all the forms of poison that had been administered to it. In order to give it a quick and painless end I selected a newly invented elephant-rifle, calibre 10·75, loaded with 4 gr. of smokeless powder and a steel-capped bullet. On reflection the steel cap seemed to me too dangerous in the circumstances, so I had it filed off. I shall allow Professor Schmalz to describe what now happened: "The first shot entered the skin between the second and third ribs, and then simply went into splinters. It did no serious damage to the interior organs, and a stag thus wounded would merely take madly to flight. A piece of the cap reached the lung, but only a single splinter had penetrated, causing a slight flow of blood. The second shot was excellently placed, namely just below the root of the lung. It lacerated both the lung arteries and both the bronchial, and thus caused instant death."

The fact that, with such a charge, a bullet fired at a distance of less than four yards should have gone into splinters in this way says more than one could in a long

disquisition, and serves to explain the secret of many a mishap in the African wilderness.[1]

[1] Latterly many sportsmen in the tropics have taken again to the use of very large-calibre rifles. Charges of as much as 21 gr. of black powder and a $26\frac{3}{4}$ mm. bullet are employed with them. It is to the kick of such a rifle that the author owes the scar which is visible in the portrait serving as frontispiece to this book—an "untouched" photograph, like all the others.

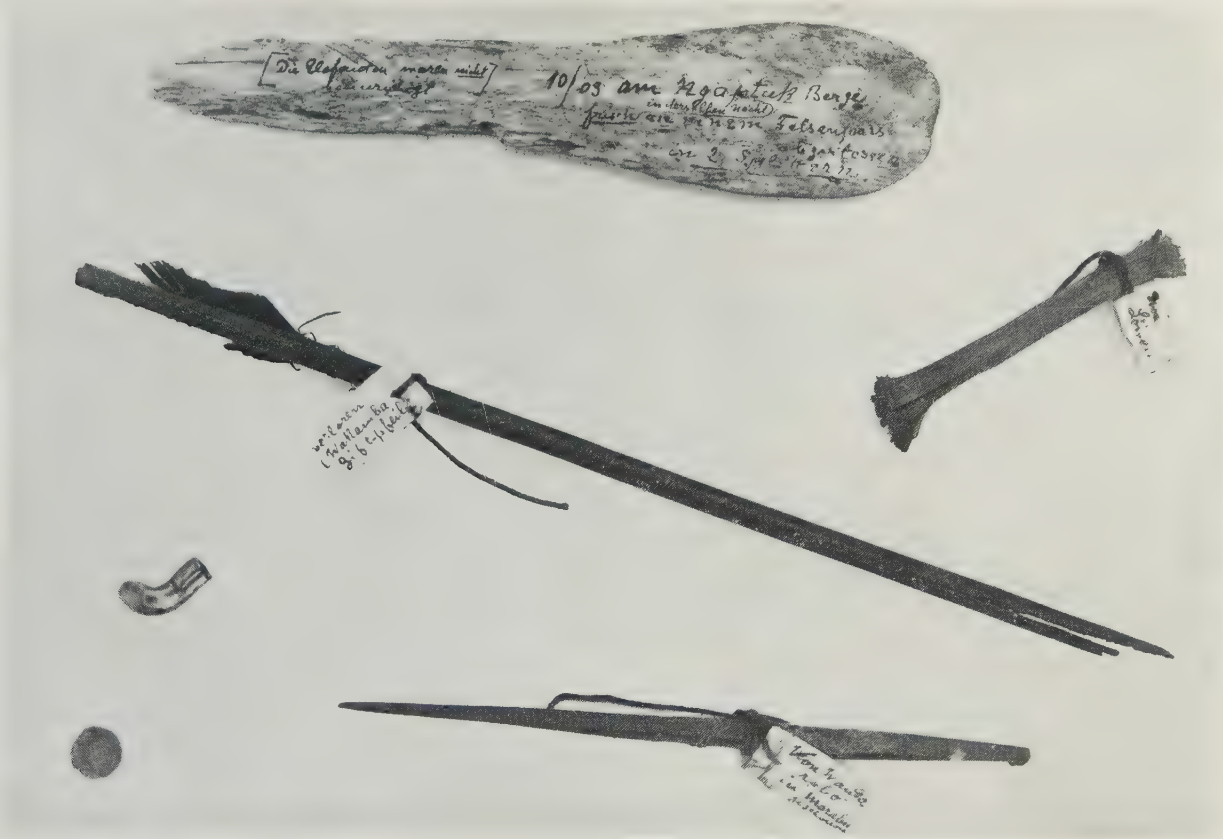
A MISSIONARY'S DWELLING NEAR KILIMANJARO IN WHICH I STAYED SEVERAL TIMES AS GUEST.

C. G. Schillings, phot.

HEAD OF A BULL-ELEPHANT KILLED BY THE AUTHOR. NOW IN THE NATURAL HISTORY MUSEUM, BERLIN.

C. G. Schillings, phot.

A FINE SPECIMEN OF A BULL-ELEPHANT KILLED BY THE AUTHOR.



C. G. Schillings, phot.

SOME AFRICAN TROPHIES. 1. SPLINTER FROM AN ELEPHANT-TUSK BROKEN OFF IN A ROCKY REGION. 2. PORTION OF A TREE BRANCH WHICH I FOUND STUCK IN THE JAW OF A CAPTURED LION. 3. PORTION OF A POISONED ARROW WHICH

BLACK-HEADED HERONS (*ARDEA MELANOCEPHALA*, VIG. Childr.).

X

Rhinoceros-hunting

MANY sportsmen of to-day have no idea what numbers of rhinoceroses there used to be in Germany in those distant epochs when the cave-dweller waged war with his primitive weapons against all the mighty animals of old—a war that came in the course of the centuries to take the shape of our modern sport.

The visitor to the zoological gardens, who knows nothing of "big game," finds it hard perhaps to think of the great unwieldy "rhino" in this capacity. Yet I am continually being asked to tell about other experiences of my rhinoceros-hunting. I have given some already in *With Flashlight and Rifle*. Let me, then, devote this chapter to an account of some expeditions after the two-horned African rhinoceros—one of the most interesting, powerful, and dangerous beasts still living.

Rhinoceroses used to be set to fight with elephants in the arena in Rome in the time of the Emperors. It is interesting to note that, according to what I have often heard from natives, the two species have a marked antipathy to each other. It is recorded that both Indian and African rhinoceroses used to be brought to Europe alive. In our own days they are the greatest rarities in the animal market, and must be almost worth their weight in gold. Specimens of the three Indian varieties are now scarcely to be found, while the huge white rhinoceros of South Africa is almost extinct. The two-horned rhinoceros of East Africa is the only variety still to be met with in large numbers, and this also is on its way swiftly to extermination.

The kind of hunt I am going to tell of belongs to quite a primeval type, such as but few modern sportsmen have taken part in. But it will be a hunt with modern arms. It must have been a still finer thing to go after the great beast, as of old, spear in hand. That is a feeling I have always had. There is too little romance, too much mechanism, about our equipment. In this respect there is a great change from the kind of hunting known to antiquity.

It was strength pitted against strength then. Strength and skill and swiftness were what won men the day. Later came a time when mankind learnt a lesson from the serpent and improved on it, discharging poisoned darts from tightened bow-strings. The slightest wound from them brought death. Then there was another step in advance, and the hunter brought down his game at

C. G. Schillings, phot.

RHINOCEROS HEADS.

C. G. Schillings, phot.

RHINOCEROS HEADS.

even greater ranges with bullets of lead and steel. A glance through the telescopic sight affixed to the perfected rifle of to-day, a gentle pressure with the finger, and the rhinoceros, all unconscious of its enemy in the distance, meets its end.

But there is at least more danger and more romance for the modern hunter in this unequal strife when it takes place in a wilderness where bush and brushwood enforce a fight at close quarters. Then, if he doesn't kill his beast outright on the spot, or if he has to deal with several at a time, the bravest man's heart will have good reason to beat fast.

Now for our start.

We make our way up the side of a hill with the first rays of the tropical sun striking hot already on the earth. The country is wild, the ascent is difficult, and we have to dodge now this way, now that, to extricate ourselves from the rocky valley into which we have got. The vegetation all around us is rank and strange ; strong grass up to our knees, and dense creepers and thorn-bushes retard our progress. Here are the mouldering trunks of giant trees uprooted by the wind, there living trees standing strong and unshaken. But as we advance we come gradually to a more arid stretch, and green vegetation gives place to a rocky region, broken into crevices and chasms. Here we find the rock-badger in hundreds. But the leaders have given their warning sort of whistle, and they are all off like lightning. It may be quite a long time before they reappear from the nooks and crannies to which they have fled. Lizards share these

localities with them, and seem to exchange warnings of coming danger. A francolin flies up in front of us with a clatter of wings, reminding one very much of our own beautiful heath-cock. The "cliff-springer" that miniature African chamois, one of the loveliest of all the denizens of the wilderness, sometimes puts in an appearance too. It is a mystery how it manages to dart about from ridge to ridge as lightly as an india-rubber ball. If you examine through your field-glasses, you discover to your astonishment that they do not rest on their dainty hoofs like others of their kind, nor can they move about on them in the same fashion. They can only stand on the extreme points of them. It looks almost as though nature were trying to free a mammal from its bonds to mother earth, when you see the "cliff-springer" fly through the air from rock to rock. It would not astonish you to find that it had wings. Now here, now there, you hear its note of alarm, and then catch sight of it. It would be difficult to descry these animals at all, only that there are generally several of them together. . . . Deep-trodden paths of elephants and rhinoceroses, cut through the wooded wilderness; paths used also by the heavy elands, which are fitted for existence alike in the deep valleys and high up on the highest mountain. I myself found their tracks at a height of over 6,000 feet, and so have all African mountain-climbers worthy of the name, from Hans Meyer, the first man to ascend Kilimanjaro, down to Uhlig, who, on the occasion of his latest expedition up to the Kibo, noted the presence of this giant among antelopes at a height of 15,000 feet.

C. G. Schillings, *phot*

AN ELAND BULL (*OREAS LIVINGSTONI*, Sclat.). I MANAGED TO PREPARE THIS ANIMAL'S SKIN SUCCESSFULLY, AND IT MAY NOW BE SEEN IN FLAWLESS CONDITION IN THE BERLIN NATURAL HISTORY MUSEUM.

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It is strange to contrast the general disappearance of big game in all other parts of the earth with their endless profusion in those regions which the European has not yet opened out. I feel that it sounds almost incredible when I talk of having sighted hundreds of rhinoceroses with my own eyes: incredible to the average man, I mean, not to the student of such matters. Not until the mighty animal has been exterminated will the facts of its existence —in what numbers it throve, how it lived and how it came to die—become known to the public through its biographer. We have no time to trouble about the living nowadays.

For weeks I had not hunted a rhinoceros—I had had enough of them. I had need of none but very powerful specimens for my collection, and these were no more to be met with every day than a really fine roebuck in Germany. It is no mean achievement for the German sportsman to bag a really valuable roebuck. There are too many sportsmen competing for the prize—there must be more than half a million of us in all!

It is the same with really fine specimens of the two-horned bull-rhinoceros. It is curious, by the way, to note that, as with so many other kinds of wild animals, the cow-rhinoceros is furnished with longer and more striking-looking horns than the bull, though the latter's are thicker and stronger, and in this respect more imposing. The length of the horns of a full-grown cow-rhinoceros in East Africa is sometimes enormous—surpassed only by those of the white rhinoceroses of the South, now almost extinct. The British Museum contains specimens

measuring as much as $53\frac{1}{2}$ inches. I remember well the doubts I entertained about a 54-inch horn which I saw on sale in Zanzibar ten years ago, and was tempted to buy. Such a growth seemed to me then incredible, and several old residents who ought to have known something about it fortified me in my belief that the Indian dealer had "faked" it somehow, and increased its length artificially. It might still be lying in his dimly lit shop instead of forming part of my collection, only that on my first expedition into the interior I saw for myself other rhinoceroses with horns almost as long, and on returning to Zanzibar at once effected its purchase. A second horn of equal length, but already half decayed when it was found on the velt, came into my possession through the kindness of a friend. I myself killed one cow-rhinoceros with very remarkable horns, but not so long as these.

There is something peculiarly formidable and menacing about these weapons of the rhinoceros. Not that they really make him a more dangerous customer for the sportsman to tackle, but they certainly give that impression. The thought of being impaled, run through, by that ferocious dagger is by no means pleasant.

In something of the same way, a stag with splendid antlers, a great maned lion, or a tremendous bull-elephant sends up the sportsman's zest to fever-pitch.

It is astonishing how the colossal beast manages to plunge its way through the densest thicket despite the hindrance of its great horns. It does so by keeping its head well raised, so that the horn almost presses against

C. G. Schillings, phot

AN ELAND, JUST BEFORE I GAVE IT A FINISHING SHOT.

the back of its massive neck, very much after the style of our European stag. But it is a riddle, in both cases, how they seem to be impeded so little.

I felt nearly sure that I could count on finding some gamesome old rhinoceroses up among the mountains, and my Wandorobo guides kept declaring that I should see some extraordinary horns. They were not wrong.

I strongly advise any one who contemplates betaking himself to the velt after big game to set about the enterprise in the true sporting spirit, making of it a really genuine contest between man and beast—a genuine duel—not an onslaught of the many upon the one. Many English writers support me in this, and they understand the claims of sport in this field as well as we Germans do at home. The English have instituted clearly defined rules which no sportsman may transgress. In truth, it is a lamentable thing to see the *Sonntagsjäger* importing himself with his unaccustomed rifle amid the wild life of Africa!

I shall always look back with satisfaction to the great Schöller expedition which I accompanied for some time in 1896. Not one of the natives, not one of the soldiers, ventured to shoot a single head of game throughout that expedition, even in those regions which until then had never been explored by Europeans. The most rigid control was exercised over them from start to finish. I have good grounds for saying that this spirit has prevailed far too little as a general thing in Africa.

I have invariably maintained discipline among my own followers, and they have always submitted to it. How

difficult it is to deal with them, however, may be gathered from the following incident which I find recorded in my diary.

On the occasion of my last journey, a black soldier, an Askari, had been told off to attach himself for a time to my caravan. Presently I had to send him back to the military station at Kilimanjaro with a message. A number of my followers accompanied him, partly to fetch goods, etc., from my main camp, partly on various other missions that had to be attended to before we advanced farther into the velt. The Askari was provided, as usual, with a certain number of cartridges. When my men returned, a considerable time afterwards, I discovered quite accidentally that one of them bore marks on his body of having been brutally lashed with a whip. His back was covered with scars and open wounds. After the long-suffering manner of his kind, he had said nothing to me about it until his condition was revealed to me by chance—for, as he was only one of the hundred and fifty attached to my expedition, I might never have noticed it. It transpired that not long after he had set out the Askari, against orders, had shot big game and, among other animals, had bagged a giraffe, whose head—a valuable trophy—he had forced my bearers to carry for him to the fort. The particular bearer in question had quite rightly refused, whereupon the Askari had thrashed him most barbarously with a hippopotamus-hide whip—a *sjambok*. I need hardly say that he was suitably punished for this when I lodged a formal complaint against him. Had it not been for his ill-treatment of my bearer, however, I

should never have heard of the Askari's shooting the giraffe, for he had succeeded in terrorising all the men into silence.

Now we move onwards, following the rhinoceros-tracks up the hill-slopes, where they are clearly marked, and in among the steep ridges, until they elude us for a while

AN ELAND BULL, THE LEADER OF A HERD WHICH AT THE MOMENT OF THIS PHOTOGRAPH WAS IN CONCEALMENT BEHIND THE THORN-BUSHES.

in the wilderness. Presently we perceive not merely a hollowed-out path wrought in the soft stone by the tramplings of centuries, but also fresh traces of rhinoceroses that must have been left this very day. We are in for a first-rate hunt.

We have reached the higher ranges of the hills and are

looking down upon the extensive, scantily-wooded slopes. Are we going to bag our game to-day?

I could produce an African day-book made up of high hopes and disappointments. Not, indeed, that returning empty-handed meant ill-humour and disappointment, or that I expected invariable good luck. But a day out in the tropics counts for at least a week in Europe, and I like to make the most of it. Then, too, I had to reserve my hunting for those hours when I could give myself up to it body and soul. How often while I have been on the march at the head of heavily laden caravans have the most tempting opportunities presented themselves to me, only to be resisted—fine chances for the record-breaker and irresponsible shot, but merely tantalising to me!

On we go through the wilderness, still upwards. I am the first European in these regions, which have much of novelty for my eyes. The great lichen-hung trees, the dense jungle, the wide plains, all charm me. The heat becomes more and more oppressive, and I and my followers are beginning to feel its effects. We are wearying for a halt, but we must lose no time, for we have still a long way before us, whether we return to our main camp or press onwards to that wooded hollow yonder, four hours' march away, there to spend the night.

A vast panorama has been opening out in front of us. We have reached the summit of this first range of hills, and are looking down on another deep and extensive valley. My field-glasses enable me to descry in the far distance a herd of eland making their way down the hill, and two bush-buck grazing hard by a thicket. But these have

no interest for us to-day: we are in pursuit of bigger game. Suddenly, an hour later, my men become excited. "Pharu, bwana!" they whisper to me from behind, pointing down towards a group of acacia trees on a plateau a few hundred paces away. True enough, there are two rhinoceroses. I perceive first one, then the other lumbering along, looking, doubtless, for a suitable resting-place. My field-glasses tell me that they are a pair, male and female, both furnished with big horns. Now for my plan of campaign. I have to make a wide circuit which will take me twenty-five minutes, moving over difficult ground.

Arrived at the point in question, I rejoice to see that the animals have not got far away from where I first spied them. The wind is favourable to me here, and there is little danger at this hour of its suddenly veering round. I examine my rifle carefully. It seems all right. My men crouch down by my order, and I advance stealthily alone.

I am under a spell now. The rest of the world has vanished from my consciousness. I look neither to right nor left. I have no thought for anything but my quarry and my gun. What will the beasts do? Will this be my last appearance as a hunter of big game? Is the rhinoceros family at last to have its revenge?

I have another look at them through my field-glasses. The bull has really fine horns; the cow good enough, but nothing special. I decide therefore to secure him alone if possible, for his flesh will provide food in plenty for my men. On I move, as noiselessly as possible, the wind still in my favour. Up on these heights the rhinoceroses miss their watchful friends the ox-peckers,

so faithful to them elsewhere, to put them on their guard.

Often have my followers warned me of the presence of a "Ndege baya"—a bird of evil omen. Many of the African tribes seem the share the old superstitions of the Romans in regard to birds. Certainly one cannot help being impressed by the way in which the ox-peckers suddenly whizz through the air whenever one gets within range of buffalo or hippopotami.

The unexpected happens. The two huge beasts—how, I cannot tell—have become aware of my approach. As though moved by a common impulse, they swing round and stand for a moment motionless, as though carved in stone, their heads turned towards me. . . . They are two hundred paces away. Now I must show myself. Two things can happen: either they will both come for me full pelt, or else they will seek safety in flight. An instant later they are thundering down on me in their unwieldy fashion, but at an incredible pace. These are moments when your life hangs by a thread. Nothing can save you but a well-aimed bullet. This time my bullet finds its billet. It penetrates the neck of the leading animal—the cow, as always is the case—which, tumbling head foremost, just like a hare, drops as though dead. A wonderful sight, lasting but a second. The bull pulls up short, hesitates a moment, then swerves round, and with a wild snort goes tearing down the hill and out of sight. I keep my rifle levelled still at the female rhinoceros, for I have known cases when an animal has got up again suddenly, though mortally wounded, and done damage.

C. G. Schillings, phot.

RHINOCEROSES SHED THEIR HORNS FROM TIME TO TIME AND DEVELOP NEW ONES. THE COW-RHINOCEROS IN THIS PHOTOGRAPH HAD SHED BOTH OF HERS. THE RHINOCEROS WHICH I BROUGHT HOME AND PRESENTED TO THE BERLIN ZOOLOGICAL GARDENS HAS RENEWED HER FRONT HORN SEVERAL TIMES.

C. G. Schillings, phot.

A GOOD SPECIMEN.

But on this occasion the precaution proves needless. The bullet has done its work, and I become the possessor of two very fair specimens of rhinoceros horns.

It was scarcely to be imagined that in the course of this same day I was to get within range of eight more rhinoceroses. It is hard to realise what numbers of them there are in these mountainous regions. It is a puzzle to me that this fact has not been proclaimed abroad in sporting books and become known to everybody. But then, what did we know, until a few years ago, of the existence of the okapi in Central Africa? How much do we know even now of its numbers? For that matter, who can tell us anything definite as to the quantities of walruses in the north, or the numbers of yaks in the Thibetan uplands, or of elks and of bears in the impenetrable Alaskan woods?

It seems to be the fate of the larger animals to be exterminated by traders who do not give away their knowledge of the resources of the hunting regions which they exploit. English and American authors, among them so high an authority as President Roosevelt, bear me out in this. I remember reading as a boy of a traveller, a fur-trader, who happened to hear of certain remote northern islands well stocked with the wild life he wanted. He kept the information to himself, and made a fortune out of the game he bagged; but when he quitted the islands their entire fauna had been wiped out. The same thing is now happening in Africa. Our only clue to the extent of the slaughtering of elephants now being carried on is furnished by the immense quantities of ivory that

come on the market. So it is, too, with the slaughtering of whales and seals for the purposes of commerce. It is with them as with so many men—we shall begin to hear of them when they are dead.

But to come back to our rhinoceroses. Not long before sunset I saw another animal grazing peacefully on a ridge just below me, apparently finding the short grass growing there entirely to his taste. The monstrous outlines of the great beast munching away in among the jagged rocks stood out most strikingly in the red glow of the setting sun. It would have been no good to me to shoot him, for all my thoughts were set on finding a satisfactory camping-place for the night. Soon afterwards I came suddenly upon two others right in my path—a cow with a young one very nearly full grown. In a moment my men, who were a little behind, had skedaddled behind a ridge of rocks. I myself just managed to spring aside in time to escape the cow, putting a great boulder between us. Round she came after me, and I realised as never before the degree to which a man is handicapped by his boots in attempting thus to dodge an animal. It was a narrow escape, but in this case also a well-aimed bullet did the trick. We left the body where it lay, intending to come back next morning for the horns. Some minutes later, after scurrying downhill for a few hundred paces as quickly as we could, so as to avoid being overtaken by the night, we met three other rhinoceroses which evidently had not heard my shot ring out. They were standing on a grassy knoll in the midst of the valley which we had now reached,

C. G. Schillings, phot.

A SNAPSHOT AT TWENTY PACES WITH A HAND-CAMERA, WHICH I HAD TO THROW AWAY THE NEXT SECOND, FOR THE "RHINO" MADE FOR ME AND ONLY TURNED ASIDE WHEN IT HAD GOT WITHIN THREE PACES OF ME!

and did not make off until they saw us. By the stream, near which we pitched our camp for the night, we came upon two more among some bushes, and yet another rushing through a thicket which we had to traverse on our way to the waterside. In the night several others passed down the deep-trodden path to the stream, fortunately heralding their approach by loud, angry-sounding snorts.

Many such nights have I spent out in the wild; but I would not now go through with such experiences very willingly, for I have heard tell of too many mishaps to other travellers under such conditions. That seasoned Rhenish sportsman Niedieck, for instance, in his interesting book *Mit der Büchse in fünf Weltteilen*, gives a striking account of a misadventure he met with in the Sudan, near the banks of the Nile. In very similar circumstances his camp was attacked by elephants during the night; he himself was badly injured, and one of his men nearly killed. This danger in regions where rhinoceroses or elephants are much hunted is by no means to be underestimated. Rather it should be taken to heart. According to the same writer, the elephants in Ceylon sometimes "go for" the travellers' rest-houses erected by the Government and destroy them. These things have brought it home to me that I was in much greater peril of my life during those night encampments of mine on the velt and in primeval forests than I realised at the time.

In those parts of East Africa there is a tendency to imagine that a zareba is not essential to safety, and that

a camp-fire serves all right to frighten lions away. It is a remarkable comment on this that over a hundred Indians employed on the Uganda Railway should have been seized by lions. In other parts of Africa even the natives are reluctant to go through the night unprotected by a zareba, because they know that lions when short of other prey are apt to attack human beings, and neither the hunter nor his camp-fire have any terrors for them.

However that may be, the true sportsman and naturalist in the tropics will continue to find himself obliged to encamp as best he may *à la belle étoile*, trusting to his lucky star to protect him as he sinks wearily to sleep.

* * * * *

The long caravan is again on the move, like a snake, over the velt. Word has come to me that at a distance of a few days' march there has been a fall of rain. As by a miracle grass has sprung up, and plant-life is reborn, trees and bushes have put out new leaves, and immense numbers of wild animals have congregated in the region. Thither we are making our way, over stretches still arid and barren. Watering-places are few and far between and hidden away. But we know how to find them, and hard by one of them I have to pitch my camp for a time.

As we go we see endless herds of animals making for the same goal—zebras, gnus, oryx antelopes, hartebeests, Grant's gazelles, impallahs, giraffes, ostriches, as well as numbers of rhinoceroses, all drawn as though by magic to the region of the rain.

With my taxidermist Orgeich I march at the head of

my caravan. My camera has to remain idle, for once

HOW ONE OF MY MEN SOUGHT SHELTER WHEN THE RHINOCEROS CAME FOR US.

again, as so often happens, we get no sun. It would be useless to attempt snapshots in such unfavourable light.

Suddenly, at last, the entire aspect of the velt undergoes a change, and we have got into a stretch of country which has had a monopoly of the downfall. It is cut off quite perceptibly from the parched districts all around, and its fresh green aspect is refreshing and soothing to the eye. On and on we march for hour after hour, the wealth of animal life increasing as we go. Early this morning I had noted two rhinoceroses bowling along over the velt. They had had a bath and were gleaming and glistening in the sun.

Now we descry a huge something, motionless upon the velt, looking at first like the stump of a massive tree or like a squat ant-hill, but turning out on closer investigation to be a rhinoceros. It may seem strange that one can make any mistake even at one's first sight of the animal, but every one who has gone after rhinoceroses much must have had the same astonishing or alarming experience.

In this case we have to deal with an unusually large specimen—a bull. It seems to be asleep. My sporting instincts are aroused. My men halt and crouch down upon the ground. I hold a brief colloquy with Orgeich. He also gets to the rear. I advance towards the rhinoceros over the broken ground between us—the wind favouring me, and a few parched-looking bushes serving me as cover. I get nearer and nearer—now I am only a hundred and fifty paces off, now only a hundred. The great beast makes no stir—it seems in truth to be asleep. Now I have got within eighty paces, now sixty. Between me and my adversary there is nothing but three-foot-high parched

shrubs, quite useless as a protection. Ah! now he makes a move. Up goes his mighty head, suddenly all attention. My rifle rings out. Spitting and snorting, down he comes upon me in the lumbering gallop I have learnt to know so well. I fire a second shot, a third, a fourth. It is wonderful how quickly one can send off bullet after

A RHINOCEROS IN THE DRY SEASON, ITS BODY EMACIATED BY THE SCANTINESS OF GRAZING-GROUNDS AND DRINKING-PLACES.

bullet in such moments. Now he is upon me, and I give him a fifth shot, *à bout portant*. In imagination I am done for, gashed by his great horn and flung into the air. I feel what a fool I was to expose myself in this way. A host of such impressions and reflections flash through my brain.

But, as it turns out, my last hour has not yet come.

On receipt of my fifth bullet my assailant swerves round and lays himself open to my sixth just as he decides to take flight. Off he speeds now, never to be seen again, though we spend an hour trying to mark him down—a task which it is the easier for us to undertake in that he has fled in the direction in which we have to continue our march.

Orgeich, in his good-humoured way, remarks drily, "That was a near thing."

Such "near things" may fall to the lot of the African hunter, however perfectly he may be equipped.

On another occasion, two rhinoceroses that I had not seen until that moment made for me suddenly. In trying to escape I tripped over a moss-covered root of a tree, and fell so heavily on my right hip that at first I could not get up again. Both the animals rushed close by me, Orgeich and my men only succeeding in escaping also behind trees at the last moment.

* * * * *

To descry one or two rhinoceroses grazing or resting in the midst of the bare velt and to stalk them all by yourself, or with a single follower to carry a rifle for you, is, I really think, as fascinating an experience as any hunter can desire. At the same time it is one of the most dangerous forms of modern sport. An English writer remarks with truth that even the bravest man cannot always control his senses on such occasions—that he is apt to get dazed and giddy. And the slightest unsteadiness in his hand may mean his destruction. He has to advance a long distance on all fours, or else wriggle along on his

PIECE OF VERY HARD STONE FROM THE SIRGOI MOUNTAIN IN BRITISH EAST AFRICA, PRESENTED TO ME BY ALFRED KAISER. RHINOCEROSES WHET THEIR HORNS AGAINST THIS KIND OF STONE, MAKING ITS SURFACE QUITE SMOOTH.

stomach like a serpent, making the utmost use of whatever cover offers, and keeping note all the time of the direction

of the wind. He has to keep on his guard all the time against poisonous snakes. And he has to trust to his hunter's instinct as to how near he must get to his quarry before he fires. I consider that a distance of more than a hundred paces is very hazardous—above all, if you want to kill outright. I am thinking, of course, of the sportsman who is hunting quite alone.

To-day I am to have an unlooked-for experience. A number of eland have attracted my attention. I follow them through the long grass, just as I did that time in 1896 when the flock of pearl-hens buzzed over me and I started the two rhinoceroses which nearly "did for" me.[1] These antelopes claim my undivided attention. The country is undulating in its formation, and my men are all out of sight. I am quite alone, rifle in hand. The animals make off to the left and in amidst the high grass. I stand still and watch them. It would be too far to have a shot at the leader of the herd, so I merely follow in their tracks, crouching down. Now I have to get across a crevice. But as I am negotiating it and penetrating the higher grass on the opposite slope, suddenly, fifty paces in front of me, I perceive a huge dark object in among the reeds—a rhinoceros.

It has not become aware of me yet, nor of the peril awaiting it. It sits up, turned right in my direction. Now there is no going either forwards or backwards for me. The grass encumbers my legs—the old growth (spared by the great fires that sometimes ravage the whole velt between two rainy seasons) mingling with the new

[1] See *With Flashlight and Rifle.*

C. G. Schillings, phot.

RHINOCEROSES OFTEN REMAIN IN THIS SITTING POSTURE FOR QUITE A LONG TIME.

[p. 464

into an inextricable tangle. Such moments are full of excitement. It is quite on the cards that a second rhinoceros—perhaps a third—will now turn up. Who knows? Moreover, I have absolutely no inducement to bag the specimen now before my eyes—its horns are not of much account. I try cautiously to retreat, but my feet are entangled and I slip. Instantly I jump up again—the rhinoceros has heard the noise of my fall and is making a rush for me, spitting and snorting. It won't be easy to hit him effectively, but I fire. As my rifle rings out I hear suddenly the singing notes like a bird in the air above, clear and resonant, and I seem to note the impact of the bullet. Next instant I see the rhinoceros disappearing over the undulating plain.

I conclude that the bullet must have struck one of his horns and been turned aside, and that it startled the beast and caused him to abandon his attack.

* * * * *

But there are yet other ways in which you may be surprised by a rhinoceros. I had pitched my camp by the Pangani, in a region which at the time of Count Telekis' expedition, some years before, was a swamp. Its swampy condition lasts only during the rainy season, but I found my camping-place to be very unsatisfactory and unhealthy. I set out therefore with a few of my men to find a better position somewhere on dryer land, if possible shaded by trees, and at a spot where the river was passable—a good deal to ask for in the African bush. For hours we pursued our search through "boga" and "pori," but the marshy ground did not even enable us to get

down to the river-side. Endless morasses of reeds enfolded us, in whose miry depths the foot sinks even in the dry weather, in which the sultry heat enervates us, shut in as we are by the rank growth that meets above our heads as we grope through it. At last we reach some solid earth, and it looks as though here, beneath some sycamores, we have found a better camping place. Deep-trodden paths lead down to the waterside. We follow them through the brushwood, I leading the way, and thus reach the stream. The rush and roar of the river resounds in our ears, and we catch the notes, too, of birds. Suddenly, right in front of me, the ground seems to quicken into life. My first notion is that it must be a gigantic crocodile; but no, it is a rhinoceros which has just been bathing, and which now, disturbed, is glancing in our direction and about to attack us or take to its heels—who can say? Escape seems impossible. Clasping my rifle I plunge back into the dense brushwood. But the tough viscous branches project me forward again. Now for it. The rhinoceros is "coming for" us. We tumble about in all directions. Some seconds later we exchange stupefied glances. The animal has fled past us, just grazing us and bespattering us with mud, and has disappeared from sight. How small we felt at that moment I cannot express! In such moments you experience the same kind of sensation as when your horse throws you or you are knocked over by a motor-car. (Perhaps this latter simile comes home to one best nowadays!) You realise, too, why the native hunters throw off all their clothing when they are after big game. On

C. G. Schillings, phot.

A ROCK-POOL ON KILIMANJARO.

CITY OF WESTMINSTER
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such occasions even the lightest covering hampers you, and perhaps endangers your life.

* * * * *

Countless thousands of two-horned rhinoceroses are still to the good in East Africa. Yes, countless thousands! Captain Schlobach tells us that he would encounter as many as thirty in one day in Karragwe in 1903 and 1904. Countless also are the numbers of horns which are secured annually for sale on the coast. But how much longer will this state of things continue? And the specimens of the white rhinoceros of South Africa which adorn the museum in Cape Town and the private museum of Mr. W. Rothschild (and which we owe to Coryndon and Varndell) are not more valuable than the specimens also to be found in the museums of the "black" rhinoceroses still extant in East Africa.

This view of the matter will perhaps receive attention fifty or a hundred years hence.

MASAI KILLING A HYENA WITH THEIR CLUBS.

XI

The Capturing of a Lion

SIMBA Station—Lion Station—is the name of a place on the Uganda Railway, which connects the Indian Ocean with the Victoria-Nyanza. It is situated near Nairobi, and the sound of its name recalls vividly to my memory January 25, 1897, the great day when I came face to face with three lions.

At that time no iron road led to the interior of the country; there were neither railway lines nor telegraph wires to vibrate to the sound of the voice of the monarch of the wilderness. But the white man was soon to bar his path by day and night along the whole length of the great railroad from lake to ocean.

"Lion Station" deserves its name, for in the vicinity of this spot over a hundred Indian workmen have been seized by lions. To me this was no surprise, for years

C. G. Schillings, phot.

IN A BETTER TEMPER.

A LION CUB IN A BAD TEMPER.

before I had visited the region, and had done full justice to its wilderness in my description of it. Some stir was caused when a lion killed a European in one of the sleeping-cars at night-time. In company with two others, the unfortunate man was passing the night in a saloon carriage which had been shunted on to a siding. One of the Europeans slept on the floor; as a precaution against mosquitoes he had covered himself with a cloth. Another was lying on a raised bunk. The lion seized the third man, who was sleeping near the two others on a camp-bed, killed him, and carried him away. One of the survivors, Herr Hübner—whose hunting-box, "Kibwezi," in British East Africa, has given many sportsmen an opportunity of becoming acquainted with African game—gave me the following account of the incident: "The situation was a critical one. The door through which the beast had entered the compartment was rolled back. I saw the creature at about an arm's length from me, standing with its fore-paws on the bed of my sleeping friend. Then a sudden snatch, followed by a sharp cry, told me that all was over. The lion's right paw had fallen on my friend's left temple, and its teeth were buried deep in his left breast near the armpit. For the next two minutes a deathly stillness reigned. Then the lion pulled the body from off the bed and laid it on the ground." The lion disappeared with the corpse into the darkness of the night. It was killed shortly after, as might be expected.

Such scenes were probably more frequent in earlier days, when, in the Orange Free State, a single hunter

would kill five-and-twenty lions. This was so even down to the year 1863, when impallah antelopes (*Æpyceros suara*) had already become very rare in Bechuanaland, and in Natal a keen control had to be instituted over the use of arms. Times have changed. In the year 1899 much sensation was aroused by the fact that a lion was killed near Johannesburg, and so far back as 1883 there was quite a to-do over a lion that was seen and killed at Uppington, on the Orange River. To Oswald and Vardon, well-known English hunters, as well as to Moffat in Bechuanaland, the encountering of as many as nine troops of lions in a day was quite an ordinary experience, and I still found lions in surprising numbers in 1896 in German and British East Africa. The practical records of the Anglo-German Boundary Commission in East Africa, the observations made lately by Duke Adolf Friedrich of Mecklenburg, and the evidence of many other trustworthy witnesses, have confirmed these facts.

Although I do not think that lions, at least in districts where game is very plentiful, are so dangerous as some would make out, yet I quite agree with the statement made by H. A. Bryden that a lion-hunt made on foot must be reckoned as one of the most dangerous sports there are. The experience of an authority like Selous, who was seized by lions during the night in the jungle, proves this.

In the region in which I had such success lion-hunting in 1897, there were many mishaps. My friend the commandant of Fort Smith in K[illegible] who

was badly mauled by lions, has since had more than one fellow-sufferer in this respect.

Captain Chauncy Hugh-Stegand, who, like Mr. Hall and so many other hunters of other nationalities, had been several times injured by rhinoceroses, was once within an ace of being killed by a lion which he encountered by night, and which he shot at and pursued. Severely wounded, and cured almost by a miracle, he had to return to England to regain his health. "Such are the casualties of sportsmen in Central and East Africa" is the dry comment of Sir Harry Johnston in his preface to the English edition of my book *With Flashlight and Rifle*.

When I read about such adventures I call to mind vividly my own. I live through them all again, and the magic of these experiences reawakes in me.

To-day I would fain give the reader some account of the capturing of lions. Not of captures made by means of a net, such as skilful and brave men used in [illegible] to throw over the king of beasts, thus disabling him and putting him in their power, but of a capture that was not without its many intense and exciting moments.

Proud Rome saw as many as five hundred lions die in the arena in one day. That was in the time of Pompey. Nearly two thousand years have passed since then, and one may safely affirm that in the intervening centuries very few lions have been brought to Europe that were caught [illegible]n in the desert. The many lions that are [illegible] our continent are caught when young,

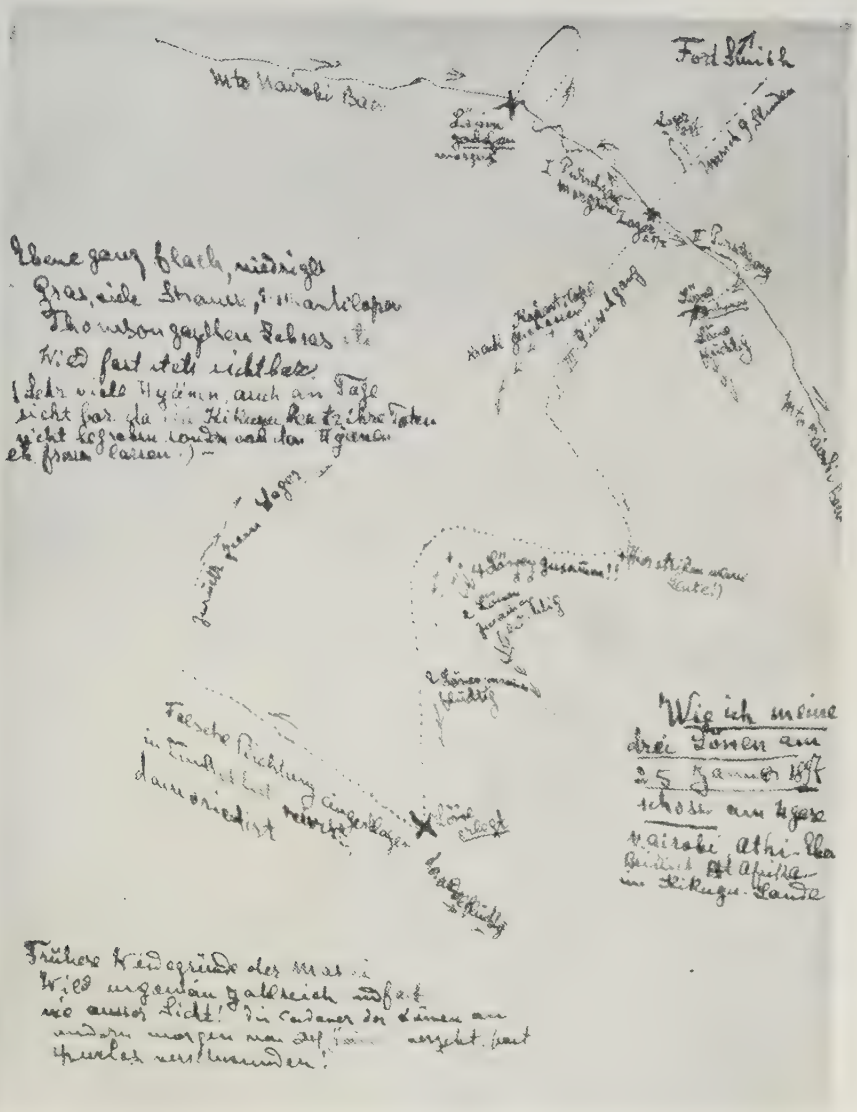
THE [illegible]
25TH [illegible]
AND A L[illegible]
II [illegible]

and then reared, despite the credence given sometimes to statements to the contrary.

It goes without saying that lions which have matured in confinement cannot compare with the lions that have come to their full development in the wilderness. Full-grown tigers and leopards are still nowadays in some cases ensnared alive, and we can see them in our zoological gardens in all their native wildness, and without any artificial breeding, marked with the unmistakable stamp common to all wild animals. It is an established fact that all captive monkeys show symptoms after a certain time of rachitis. This is also the case frequently with large felines. Lions brought up in captivity, however, have far finer manes than wild ones.

Of course a certain number of the lions used in the arena-fights in Rome were probably reared in the Roman provinces by some potentate. But without doubt a large number were caught when fully grown by means of nets, pitfalls, and other devices of which we have no precise details.

It seemed to me worth while to make a trial of the means which had once been so successful. As I have already pointed out, there is a great difference between a man who scours the wilderness solely as a hunter, and one who makes practical investigations into the life of the animal world. The sportsman may possibly sneer at the use of pitfalls. He has no mind for anything but an exciting encounter with the lion, an encounter which, thanks to modern means of warfare, is much easier for the man than formerly.


Ebene ganz flach, niedriges Gras, viele Strauss, Antilopen, Thomson gazellen Zebras etc. Wird fast steti sichtbar.
Sehr viele Hyänen, auch am Tage nicht scheu. Da die Hiesigen die Leichen ihrer Toten nicht begraben sondern auf den Hyänen etc fressen lassen.) –
Wie ich meine drei Löwen am 25 Januar 1897 schoss am Ufer Nairobi Athi-Fluss Mittel Afrika im Kikuyu-Lande
Frühere Weidegründe der Masai Wild ungeheuer zahlreich

ANOTHER OF MY HUNTING CARDS. THE RECORD OF MY LION-HUNT OF THE 25TH JANUARY, 1897, ON THE ATHI PLAINS, WHEN I KILLED TWO LIONS AND A LIONESS ("LÖWE"=LION; LÖWIN=LIONESS).

However, I have no wish whatever to lay down the law on this question of the relative amount of danger involved in the shooting or the trapping of lions. In many parts of Africa lion-hunting is a matter of luck, above all where horses cannot live owing to the tsetse-fly, and where dogs cannot be employed in large numbers (as used to be the practice in South Africa) to mark down the lions until the hunter can come. For example, we have it on good authority that the members of an Anglo-Abyssinian Border Commission, aided by a pack of dogs, were able to kill about twenty lions in the course of a year. But on entering the region of Lake Rudolf all the dogs fall victims to the tsetse-fly. Hunting with a pack of dogs is very successful. Dogs were used by the three brothers Chudiakow, who, some nine years ago, near Nikolsk on the Amur, in Manchuria, killed nearly forty Siberian tigers in one winter[1]; whilst a hunting party near Vladivostock killed in one month one hundred and twenty-five wild boars and seven tigers. Tigers are so plentiful near Mount Ararat that a military guard of three men is neces[illegible] during the night-watch to ward off th[illegible]

k on January 25, 1897, when I kille[illegible] lions, fine big specimens, was of course a [illegible] of much satisfaction to me. The little sketch-map of the day's hunt which accompanies this chapter shows the route I took on that memorable

[1] In winter, Siberia affords a refuge to beautiful long-haired tigers, such as can be seen in the Berlin Zoological Gardens.

[2] For this information I am indebted to the kindness of the experienced Russian hunter Ceslav von Wancowitz.

occasion, and gives a good idea of the way in which I am accustomed to keep a record of such things in my diary. I must add that my adventures and narrow escapes while trying to secure lions have been of a kind such as would be to the taste only of those most greedy of excitement.

In 1897 I had already observed that the lion was to be found in great troops in thinly populated neighbourhoods, where he was at no loss for prey and where he had not much to fear from man. As many as thirty lions have been found together, and I myself have seen a troop of fourteen with my own eyes. Other sportsmen have seen still larger troops in East Africa. Quite recently Duke Adolf Friedrich of Mecklenburg, who, on the occasion of his second African trip, made some interesting observations in regard to lions, has borne witness to the existence of very large troops. During the period in which I devoted myself entirely to making photographic studies of wild life, and consequently left undisturbed all the different species of game which swarmed around my camp, I was sometimes surrounded for days, weeks even, by great numbers of them, sometimes to an alarming extent. I have already described how one night an old lion brushed close by my tent to drink at the brook near which we were encamping, although it was just as easy for him to drink from the same stream at any point for miles to either side of us. On another occasion, as could be seen from the tracks, lions approached our camp until within a few yards of it. When I was photographing the lions falling upon the heifers and donkeys, as described in *With Flashlight*

and Rifle, I must have been, judging by the tracks,

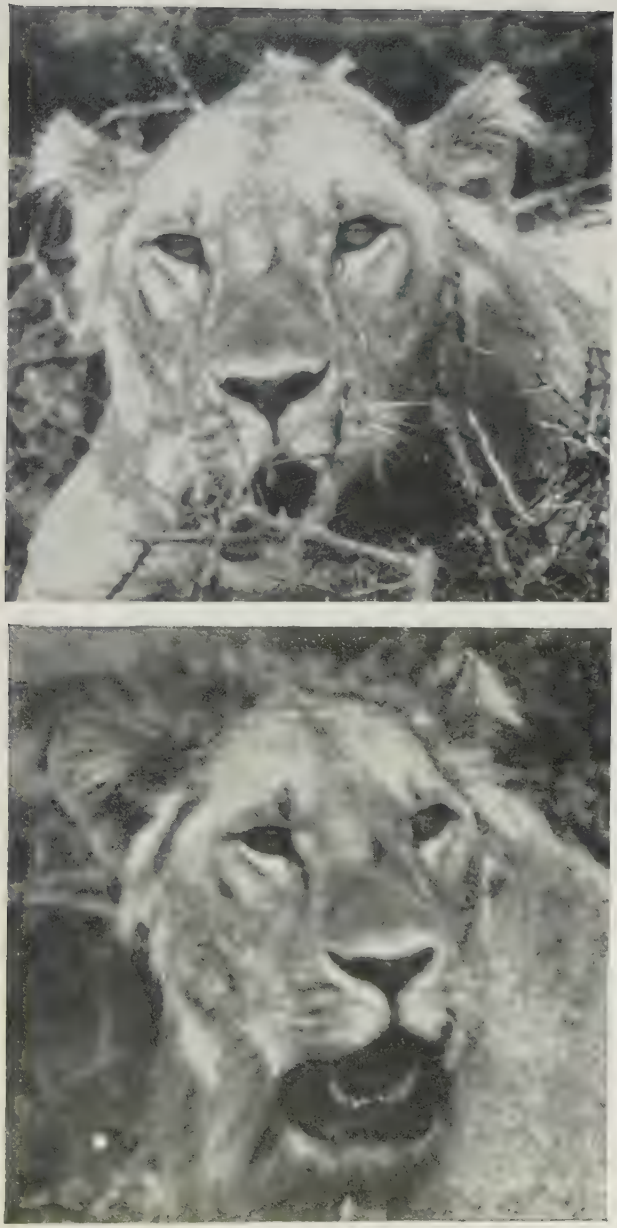
AT BAY.

surrounded by about thirty. I trapped a number of them, either for our various museums, where specimens

in various stages of development and age are much needed, or to protect the natives who were menaced by lions, or whose relatives had perhaps been seized by them.

It is the more necessary to have recourse to traps in that one may spend years hunting in Equatorial East Africa without getting a single chance of firing a shot at a lion. The hunt has to take place at night, for the lion leads a nocturnal life, and makes off into inaccessible thickets by day.

But what I was most anxious to do was to secure a specimen or two that I could bring alive to Europe. To do this, I required the lightest possible and most portable iron cages, which should yet be strong enough to resist every effort of the imprisoned animals to get free. This problem was solved for me as well as it could be by Professor Heck, the Director of the Berlin Zoological Gardens. Yet even he declared it to be impossible to make such cages under 330 lbs. in weight. For the transport of one such cage the services of six bearers would be necessary. I arranged for several such cages to be sent oversea to Tanga, and took them thence into the interior. Thus I had the assurance of keeping my captives in security, but first I had to get hold of them without hurting them. By means of a modified form of iron traps I was able to manage this eventually. Those who are not acquainted with the difficulties of transport in countries where everything has to be borne on men's shoulders will hardly be able to realise the straits to which one may be put. Thus I was much hampered, when carrying back my



STUDIES OF A TRAPPED LION AT CLOSE QUARTERS.

first lion (which was unharmed save for a few skin scratches), by a lack of bearers owing to famine and other causes.

I had found the tracks of a lioness with three quite little cubs. I followed them for an hour over the velt—they then got lost in the thick bush. As I had already observed the tracks of this little band for several days, I naturally concluded that the old lioness was making a stay in the neighbourhood. So I decided, as one of my heifers was ill from the tsetse sickness and bound to die, to pitch my tent in the neighbourhood and to bait a trap with the sick animal.

I found water at about an hour and a half's distance from the spot where I had observed the lion's tracks. I was thus obliged to encamp at this distance away. Later on in the evening, after much labour, I succeeded in setting a trap in such a way that I had every reason to hope for good results.

In the early hours of the following morning I started out, full of hope, to visit my trap. Already in the distance I could see that my heifer was still alive, and I immediately concluded that the lions had sought the open. But it was not so, for to my surprise I presently found fresh tracks of the old lioness and her cubs. Evidently she had visited the trap, but had returned into the bush without taking any notice of the easy prey. The lie of the land allowed me to read the lion's tracks imprinted into the ground as if in a book. They told me that the cubs had at one point suddenly darted to one side, their curiosity excited by a land-tortoise whose back was now reflecting the rays of

the sun, and which in the moonlight must have attracted their attention. They had evidently amused themselves for a while with this plaything, for the hard surface of the tortoise's shell was marked with their claws. Then they had returned to their mother. I concluded that the old lioness was not hungry and had no more lust for prey—another confirmation of the fact that lions, when sated, are not destructive. This new proof seemed to me to be worth all the trouble I had taken.

The two following nights, to my disappointment, the lions approached my heifer again without molesting it.

This was the more annoying because I had hoped by capturing the old lioness to obtain possession of all the young cubs as well.

In this case, as in many others, the behaviour of the heifer was a matter of great interest. As already remarked, in most cases I made use of sick cows mortally afflicted by the tsetse-fly. In many districts in German East Africa the tsetse-fly, which causes the dreadful sleeping sickness in man, also makes it impossible to keep cattle except under quite special conditions. This heifer, then, was already doomed to a painful death through the tsetse illness, and the fate I provided for it was more merciful, for the lion kills its prey by one single powerful bite. I observed, moreover, that the bound animal took its food quite placidly and showed no signs of unrest so long as the lion came up to her peaceably, as in this case. This accorded entirely with my frequent observations of the behaviour of animals towards lions on the open velt. Antelopes out on the velt apparently take very little

C. G. Schillings, phot.

THIS LION, AN OLD ANIMAL WITH A FINE MANE, HAD DRAGGED AWAY THE IRON TRAP SOME DISTANCE. HE MADE FOR ME THE MOMENT I HAD TAKEN THIS PHOTOGRAPH AT NEAR RANGE, BUT THE TRAP IMPEDED HIS MOVEMENTS AND A WELL-PLACED BULLET PUT AN END TO HIM.

C. G. Schillings, phot.

CARRYING IN TRIUMPH TO MY CAMP A LION WHICH I HOPED TO BRING BACK WITH ME TO EUROPE.

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notice of lions, though they hold themselves at a respectful distance from them.

In spite of my want of success, I decided to try my luck once more, though the surroundings of my camp were not very alluring and game was very scarce with the exception of a herd of ostriches, which for hours together haunted the vicinity. I hoped this time the lioness would be bagged. But no, I never came across her or her young again.

Instead, on the fourth morning, I found a good maned specimen—an old male—at my mercy. Loud roars announced the fact of his capture to me from afar. The first thing was to discover whether he was firmly held by the iron, and also whether he was unhurt. I assured myself of both these points after some time, with great trouble and difficulty, and, needless to add, not without considerable danger. I leave the reader to imagine for himself the state of mind in which one approaches the King of Beasts in such circumstances. I can vouch for it that one does so with a certain amount of respect for His Majesty.

The roaring of an enraged lion, once heard, is never to be forgotten. It is kept up by my captive without intermission, a dull heavy rumble suddenly swelling to a tremendous volume of sound. The expression of its face and head, too, show fierce anger and threaten danger. The terrible jaws now scrunch the branches within reach, now open menacingly.

It was now necessary to free the lion from the trap and to bring it into camp. It would take a week to get

my cage, but meanwhile I decided to fasten the animal by means of a strong chain and with a triple yoke specially made for such a purpose in Europe.

But even the bravest of my men absolutely refused to obey my command. It needed the greatest persistence to persuade some of them, at last, to lend a helping hand to me and my assistant Orgeich. As usual they required

A CAPTURED LIONESS, SNAPSHOTTED AT THE VERY MOMENT OF BEING TRAPPED.

the stimulus of a good example. After some time I had, as can be seen on pages 485 and 499, set up my photographic apparatus right in front of the lion so as to take several photos of him at the distance of a few paces.

Then we cut a few saplings about as thick as one's arm, and with these we tried to beat down the lion so as to secure him. At first this did not succeed at all. I then

had recourse to strong cord, which I made into a lasso. It was wonderful, when I caught the head of the prisoner in the noose, to see him grip it with his teeth and to watch the thick rope fall to pieces as if cut with a pair of scissors after a few quick, angry bites. During this trial I made a false step on the smooth, grassy ground, so well known to African explorers, and was within a hair's breadth of falling

A TRAPPED LION. I HEARD HIM ROARING AT A DISTANCE OF A MILE AND A HALF.

into the clutches of the raging beast had not my good taxidermist happily dragged me back. After various further efforts, during which my people were constantly taking fright, I at length succeeded in fastening the head as well as the paws of the beast. With the help of the branches the body was laid prostrate on the ground, a gag was inserted between the teeth, the prisoner was released from

the trap and, fastened to a tree-trunk, was carried into camp.

But what takes only a few words to describe involved hours of work. It was a wonderful burden, and one not to be seen every day! In my previous book I have already described how we carried a half-grown lion in a similar manner, and I have given an illustration of the scene. Unfortunately some of my best photographs, showing my bearers carrying this full-grown lion, were lost while crossing a river.

I was full of delight at the thought of my captive as he would appear in my encampment. But to my great chagrin the lion died in it quite suddenly, evidently from heart failure. We could find no trace of any wound.

There was something really moving at this issue to the struggle, in the thought that I, using wile against strength, should have overpowered and captured this noble beast only to break his heart!

This failure made me fear that I should never succeed in capturing a lion by such methods. It seemed almost better to use a large grating-trap in which it could be kept for several days and gradually accustomed to the loss of its freedom. But this meant an expensive apparatus which was quite beyond the funds of a private individual with narrow means like myself. My efforts to capture lions by means of pits dug by the natives were quite unsuccessful, because the lions always found a way out.

A younger male lion which was entrapped lived for nearly a month chained up in my camp. This one had hurt its paw when captured, and in spite of every care

C. G. Schillings, phot.

FLASHLIGHT PHOTOGRAPH OF A LION. THE ANIMAL HAD MOVED SO SWIFTLY THAT THE APPARATUS WAS NOT QUITE IN TIME TO TAKE IN ITS WHOLE BODY.

a bad sore gradually festered. It wounded one of my people very badly by ripping open a vein in his arm when he went to feed it.

Thus terminated my efforts to bring an old lion to Europe.

Much that is easy in appearance is troublesome in reality. Even when the animal is overcome, the transportation of it to the coast is accompanied by almost insuperable difficulties. It means something to carry beast and cage, a burden amounting to something like eight hundred pounds, right through the wilderness by means of bearers. Even with the help of the Uganda Railway it has not been possible to bring home a full-grown lion. I have repeatedly caught lions for this purpose, but have always experienced ultimate failure.

Sometimes the animals would not return to the place where I had tracked or sighted them, or would steer clear of the decoy. One often meets with this experience in India with tigers, which are decoyed in much the same way, and then shot from a raised stand. Interesting information about the behaviour of tigers in such cases may be found in the publications of English hunters, as well as in the very interesting book on tropical sport by P. Niedieck, a German hunter of vast experience. I might perhaps have succeeded on subsequent occasions in transporting old lions, but I never had the strong cages at hand. Now perhaps they are rusted and rotted, as well as the other implements which I hid or buried on the velt, not having bearers enough to carry them, and hoping to find them again later.

I had a most interesting adventure, once, with a lion on the right bank of the Rufu River.

For several nights the continuous roaring of a lion had been heard in the immediate vicinity of my camp. In spite of all my attempts to get a sight of the beast by day I could not even find the slightest trace of it. Moreover, the vegetation in the neighbourhood of the river was not at all suitable for a lion-hunt. I decided to try my luck with a trap. A very decrepit old donkey was used as a bait, and killed by the lion the very first night. But to my disappointment the powerful beast of prey had evidently killed the ass with one blow, and with incredible strength had succeeded in dragging it off into the thicket without as much as touching the trap. Very early the next morning I found the tracks, which were clearly imprinted on the ground. Breathlessly I followed up the trail step by step in the midst of thick growth which only allowed me to see a few paces around me. I crept noiselessly forward, followed by my gun-bearer, knowing that in all probability I should come upon the lion.

The trail turned sharply to the left through some thick bushes. Now we came to a spot where the thief had evidently rested with his spoil; then the tracks led sharply to the right and went straight forward without a pause.

We had been creeping forward on the sunlit sand like stealthy cats, with every nerve and muscle taut, my people close behind me, I with my rifle raised and ready to fire—when, suddenly, with a weird sort of growl it leapt up right in front of us and was over the hard sand and away.

C. G. Schillings, phot.

PHOTOGRAPH TAKEN AT A DISTANCE OF ABOUT FIVE PACES OF A LION WHICH I CAPTURED ALIVE AND BROUGHT BACK TO CAMP — A SPECIMEN OF THE MANELESS LIONS OF THE MASAI VELT. SOME OF THE VERY OLD LIONS DEVELOP MANES EVEN IN THIS REGION, BUT NEVER TO THE EXTENT USUAL WITH LIONS IN CAPTIVITY, OR WITH THE ALMOST EXTINCT SPECIES OF THE ATLAS COUNTRY OR OF SOUTH AFRICA.

It is astonishing how [illegible] stampede of a lion reverberates even in the far distance!

A few steps further I came upon the remains of the ass. The lion had gained the open when I got out of the brushwood. It was useless to follow the tracks, for they led only to stony ground, where they would be lost. Discouraged, I gave up the pursuit for the time, but only

MY PLUCKY TAXIDERMIST MANAGED TO GET THIS CAPTURED HYENA UNHARMED INTO CAMP, PROTECTING HIMSELF WITH A BIG CUDGEL.

to return a few hours later. Approaching very cautiously to the place where I had left the remains of the donkey, we found they were no longer there. The lion had fetched them away. We followed again, but to my unspeakable disappointment with the same result as in the morning. I managed this time, however, to get near the lion through the brushwood, but he immediately took to flight again—

when only a few yards from me, though hidden by bushes. Perhaps he is still at large in this same locality!

Lions—generally several of them together—killed my decoys on several occasions without themselves getting caught. I once surprised a lion and two lionesses at such a meal in the Njiri marshes, in June 1903. Unfortunately the animals became aware of my approach, and now began just such a chase as I had already successfully undertaken on January 25, 1897.[1]

I was able by degrees to gain on the satiated animals. A wonderful memory that! Clear morning light, a sharp breeze from over the swamps, the yellowish velt with its whitish incrustation of salt—a few bushes and groups of trees—and ever before me the lions, beating their reluctant retreat, now clearly visible, now almost out of sight.

I try a shot. But they are too far—it is no use. Puffing and panting, I feel my face glow and my heart beat with my exertions. At length one lioness stops and glances in my direction. I shoot, and imagine I have missed her. All three rapidly disappear in a morass near at hand. All my efforts seem to have been in vain. . . . Eight days later, however, I bag the lioness, and find that my ball has struck her right through the thigh.

It may happen that a lion caught in a trap gets off with the iron attached to him, and covers vast stretches of country. The pursuer has then an exciting time of it. If the animal passes through a fairly open district the issue is probably successful. But I have sometimes been obliged

[1] Herr Niedieck also underwent a similar experience. See his book *Mit der Büchse in fünf Weltteilen*, and my own *With Flashlight and Rifle*.

C. G. Schillings, phot.

CARRYING A LIVE HYENA BACK TO CAMP.

to wade through a morass of reeds for hours at a stretch. The hunter should remember that the irons may have gripped the lion's paw in such a way that he may be able to shake them off with a powerful effort. Then the tables may easily be turned, and the lion may clasp the hunter, never to let him go again.

On another occasion I caught two full-grown lions in

MY HYENA, THE ONE I AFTERWARDS BROUGHT TO EUROPE AND PRESENTED TO THE BERLIN ZOOLOGICAL GARDENS. IT WAS CHAINED UP IN CAMP.

one night. They had roamed about quite near my camp night after night. They had frightened my people, and had been seen by the night sentinels; but in the daytime no one had been able to catch a glimpse of them. At last one night a sick ass, that had been placed as a bait, was torn away. The trail of the heavy irons led, after much turning and twisting, to a reedy swamp. Here it

was impossible to follow the tracks further. Several hours passed before I succeeded finally in finding first one lion and then the other. To kill them was no easy matter. I could hear the clanking of the chains where they were moving about, but I must see them before I could take effective aim. Meanwhile one of the lions was making frantic efforts to free himself. Supposing the irons were to give way! But these efforts were followed by moments of quiet and watching. How the beasts growled!

I cannot agree with those who condemn indiscriminately the trapping of lions. Of course, it must be done for a good purpose. I should not have been able to present the Imperial Natural History Museum in Berlin with such beautiful and typical lions' skins had I not had recourse to these traps.

A lion story with a droll ending came to me from Bagamoÿo. There a lion had made itself very obnoxious, and some Europeans determined to trap it. The trap was soon set, and a young lion fell into it. Several men armed to the teeth approached the place, to put an end to the captive with powder and shot. I cannot now exactly remember what happened next, but on the attempt of the lion to free itself from the trap the riflemen took to their heels and plunged into a pond. According to one version, the lion turned out afterwards to be only a hyena!

At one time there was a perfect plague of lions near the coast towns—Mikindani, for instance. Hungry lions attacked the townsfolk on many occasions, and even poked their heads inside the doors of the dwellings.

C. G. Schillings, phot.

MASAI MAKING GAME OF A HYENA WHICH HAD ATTACKED THEIR KRAAL AND WHICH I HAD TRAPPED AT THEIR REQUEST. THEY KILLED IT AT LAST WITH A SINGLE SPEAR-STAB THROUGH THE HEART.

The extermination of wild life has been almost as great a disaster to the lions as to the bushmen of South Africa. Extermination awaits bushman and lion in their turn—not through hunger alone.

I was more fortunate in my attempt to get a fine example of the striped hyena (*Hyena schillingsi*, Mtsch.), which I had previously discovered, and in bringing it to Germany, where I presented it to the Berlin Zoological Gardens. On page 501 is to be seen a picture of one of this species caught in a trap. Orgeich, my plucky assistant, had armed himself with a big cudgel, for use in the case of the beast attacking him, but never lost his equanimity, and smoked his indispensable and inseparable pipe the whole time! Another illustration is of a hyena which was confined in the camp. This fine specimen, an old female, was very difficult to take to the coast. Something like forty bearers were needed to transport the heavy iron apparatus with its inmate as far as Tanga. This representative of its species was one of the first brought alive to Europe, and lived for several years in the Berlin Zoological Gardens.

It is less troublesome to obtain possession of smaller beasts of prey. Thus I kept three jackals (*Thos. schmidti*, Noack) in my camp until they became quite reconciled to their fate. It is very interesting to study the various characteristics of animals at such times. Some adapt themselves very easily to their altered circumstances; others of the same species do so only after a long struggle. The study of animal character can be carried on very well under the favourable conditions of camp life in the wild.

Although grown jackals may be fairly easily brought over to Europe, we had great difficulty with members of the more noble feline race, and above all with the King of Beasts himself. I learnt by experience that lynxes and wild cats were only to be tamed with great difficulty, and I once lost a captive lynx very suddenly in spite of every care.

These things are not so simple. This is why it is not yet possible to bring many of the most charming and most interesting members of the African animal world to Europe. I much wish that it were possible to bring full-grown lions over. I would far rather see one or two of them in all their native wildness and majesty than a whole troop of home-reared and almost domesticated specimens.

But the hours I devoted to my own attempts in this direction were not spent in vain. They were memorable hours, full of splendid excitement.

A FEW SPECIMENS OF ELEPHANT-TUSKS SECURED BY THE EMISSARIES OF DEUSS & CO., IN PORTUGUESE EAST AFRICA.

XII

A Dying Race of Giants

EVERY one who knows Equatorial East Africa will bear me out in saying that it is easier nowadays to kill fifty rhinoceroses than a single bull-elephant carrying tusks weighing upwards of a couple of hundred pounds.

There are only a few survivors left of this world-old race of giants. Many species, probably, have disappeared without leaving a single trace behind. The block granite sarcophagi on the Field of the Dead in Sakkarah in Egypt, dating from 3,500 years ago, are memorials (each weighing some 64 tons) of the sacred bulls of Apis: the mightiest monument ever raised by man to beast. Bulls were sacred to Ptah, the God of Memphis, and their gravestones—which Mariette, for instance, brought to light in 1851—yield striking evidence

of the pomp attached to the cult of animals in those days of old.

But no monument has been raised to the African elephants that have been slaughtered by millions in the last hundred years. Save for some of the huge tusks for which they were killed, there will be scarcely a trace of them in the days to come, when their Indian cousins—the sacred white elephants—may perhaps still be revered.

John Hanning Speke, who with his fellow-countryman Grant discovered the Victoria Nyanza, found elephant herds grazing quite peacefully on its banks. The animals, nowadays so wild, hardly took any notice when some of their number were killed or wounded : they merely passed a little farther on and returned to their grazing.

The same might be said of the Upper Nile swamps in the land of the Dinkas, in English territory, where, thanks to specially favourable conditions, the English have been successfully preserving the elephants. Also in the Knysna forests of Cape Colony some herds of elephants have been preserved by strict protective laws during the last eighty years or so. Experience with Indian elephants has proved that when protected the sagacious beasts are not so shy and wild as is generally the case with those of Africa. For the latter have become, especially the full-grown and experienced specimens, the shyest of creatures, and therefore the most difficult to study.

Should any one differ from me as to this, I would beg him to substantiate his opinion by the help of photo-

Photographed at Zanzibar.

THE HEAVIEST ELEPHANTS' TUSKS EVER RECORDED IN THE ANNALS OF EAST AFRICAN TRADE. THEY WEIGHED 450 POUNDS. I TRIED IN VAIN TO SECURE THEM FOR A GERMAN MUSEUM. THEY WERE BOUGHT FOR AMERICA.

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graphs, taken in the wilderness, of elephants which have not been shot at—photographs depicting for us the African elephant in its native wilds. When he does, I shall "give him best"!

The elephant is no longer to be found anywhere in its original numbers. It is found most frequently in the desert places between Abyssinia and the Nile and the Galla country, or in the inaccessible parts of the Congo, on the Albert Nyanza, and in the hinterlands of Nigeria and the Gold Coast. But in the vicinity of the Victoria Nyanza things have changed greatly. Richard Kandt tells us that a single elephant-hunter, a Dane, who afterwards succumbed to the climate, alone slaughtered hundreds in the course of years.

According to experts in this field of knowledge, some of the huge animals of prehistoric days disappeared in a quite brief space of time from the earth's surface. But we cannot explain why beasts so well qualified to defend themselves should so speedily cease to exist. However that may be, the fate of the still existing African elephant appears to me tragic. At one time elephants of different kinds dwelt in our own country.[1] Remains of the closely related mammoth, with its long hair adapted to a northern climate, are sometimes excavated from the ice in Siberia. Thus we obtain information about its kind of food, for remnants of food well preserved by the intense

[1] Little elephants only a yard high used to inhabit Malta, and there still lives, according to Hagenbeck, the experienced zoologist of Hamburg, a dwarf species of elephant in yet unexplored districts of West Africa.

cold have been found between the teeth and in the stomach—remnants which botanists have been able to identify.

By a singular coincidence, the mammoth remains preserved in the ice have been found just at a time when the craze for slaughtering their African relations has reached its climax, and when by means of arms that deal out death at great, and therefore safe distances, the work of annihilation is all too rapidly progressing. The scientific equipment of mankind is so nearly perfect that we are able to make the huge ice-bound mammoths, which have perhaps been reposing in their cold grave for thousands of years, speak for themselves. And it can be proved by means of the so-called "physiological blood-proof" that the frozen blood of the Siberian mammoths shows its kinship with the Indian and African elephant!

It is strange to reflect that mankind, having attained to its present condition of enlightenment, should yet have designs upon the last survivors of this African race of giants—and chiefly in the interests of a game! For the ivory is chiefly required to make billiard balls! Is it not possible to contrive some substitute in these days when nothing seems beyond the power of science?

A. H. Neumann, a well-known English hunter, says that some years ago it was already too late to reap a good ivory harvest in Equatorial Africa or in Mombasa. He had to seek farther afield in the far-lying districts between the Indian Ocean and the Upper Nile, where he obtained about £5,000 worth of ivory during one hunting expedition.

A STORE OF ELEPHANTS' TUSKS IN ONE OF THE WORKROOMS OF THE IMPORTANT IVORY FACTORY OF A. MEYER AT HAMBURG. IT SHOULD BE BORNE IN MIND THAT THERE ARE A NUMBER OF OTHER SUCH FACTORIES ON THE CONTINENT AND IN AMERICA.

Meanwhile powder and shot are at work day and night in the Dark Continent. It is not the white man himself who does most of the work of destruction ; it is the native who obtains the greater part of the ivory used in commerce. Two subjects of Manga Bell, for instance, killed a short time back, in the space of a year and a half, elephants enough to provide one hundred and thirty-nine large tusks for their chief! There is no way of changing matters except by completely disarming the African natives. Unless this is done, in a very short time the elephant will only be found in the most inaccessible and unhealthy districts. It does not much matter whether this comes about in a single decade or in several. What are thirty or forty or fifty years, in comparison with the endless ages that have gone to the evolution of these wonderful animals ? It is remarkable, too, that in spite of all the hundreds of African elephants which are being killed, not a single museum in the whole world possesses one of the gigantic male elephants which were once so numerous, but which are now so rarely to be met with. Accompanying this chapter is a photograph of the heaviest elephant-tusks which have ever reached the coast from the interior. The two tusks together weigh about 450 pounds. One can form some idea of the size of the elephant which carried them ! I was unfortunately unable to obtain these tusks for Germany, although they were taken from German Africa. They were sent to America, and sold for nearly £1,000.

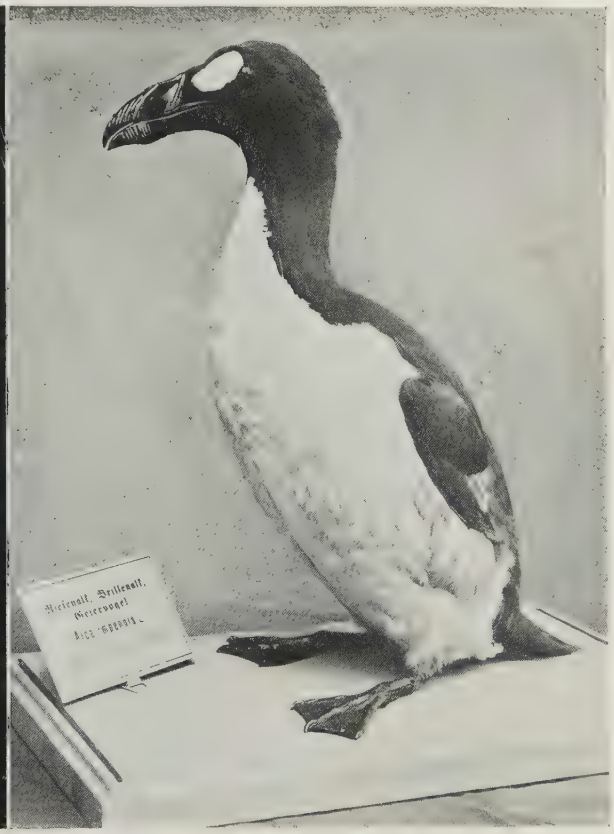
I should like the reader to note, also, the illustration showing a room in an ivory factory. The number of

tusks there visible will give an approximate notion of the tremendous slaughter which is being carried on.

The price of ivory has been rising gradually, and is now ten times what it was some forty years ago in the Sudan, according to Brehm's statistics. In Morgen's time one could buy a fifty-pound tusk in the Cameroons for some stuff worth about sevenpence. In the last century or two the price of ivory has risen commensurately with that of all other such wares. Nowadays a sum varying from £300 to £400 may be obtained for the egg of the Great Auk, which became extinct less than half a century ago: whilst a stuffed specimen of the bird itself is worth at least £1,000. What will be the price of such things in years to come!

In the light of these remarks the reader will easily understand how greatly I prize the photographs which I secured of two huge old bull-elephants in friendly company with a bull-giraffe, and which are here reproduced. It will be difficult, if not indeed impossible, ever again to photograph such mighty "tuskers" in company with giraffes. In the year 1863 Brehm wrote that no true picture existed of the real African elephant in its own actual haunts. The fact brought to light by these pictures is both new and surprising, especially for the expert, who hitherto has been inclined to believe that giraffes were dwellers on the velt and accustomed to fight shy of the damp forests. That they should remain in such a region in company with elephants for weeks at a time was something hitherto unheard of. I do not know how to express my delight at being able after long hours of

AN AUK'S EGG, ABOUT THREE-FIFTHS OF ACTUAL SIZE. AUK'S EGGS COME INTO THE MARKET IN ENGLAND FROM TIME TO TIME AND FETCH AS MUCH AS £300 APIECE.



THE SPECIMEN OF THE AUK PRESERVED IN THE BERLIN NATURAL HISTORY MUSEUM. IT WOULD BE WORTH AT LEAST £1,000 IF OFFERED FOR SALE.

patient waiting to sight this rare conjunction of animals from my place of observation either with a Goerz-Trizeder or with the naked eye, but only for a few seconds at a time, because of the heavy showers of rain which kept falling. How disappointing and mortifying it was to find oneself left in the lurch by the sun—and just immediately under the Equator, where one had a right to it! What I had so often experienced in my photographic experiments in the forests by the Rufu River—that is, the want of sunlight for days together—now made me almost desperate. At any moment the little gathering of animals might break up, in which case I should never be able to get a photographic record of the strange friendship. Since the publication of my first work I have often been asked to give some further particulars about this matter. Therefore, perhaps these details, supported by photographs, will not be unacceptable to my readers.

I candidly admit that had I suddenly come upon these great bull-elephants in the jungle in years gone by I could not have resisted killing them. But I have gradually learned to restrain myself in this respect. It would have been a fine sensation from the sportsman's standpoint, and would besides have brought in a round sum of perhaps £500; but what was all that in comparison with the securing of one single authentic photograph which would afford irrefutable proof of so surprising a fact?

The western spurs of the great Kilimanjaro range end somewhat abruptly in a high table-land, which is grass-grown and covered in patches with sweet-smelling acacias. This undulating velt-region gradually slopes down until in

its lowest parts the waters collect and form the western Njiri marshes, which at some seasons of the year are almost dry. Volcanic hills arise here and there on the plain, from whose summits one can obtain a wide view. One of the most prominent of these hills has a cavity at its summit. It is evidently the crater of an extinct volcano which is filled with water, like the volcanic lakes of my native Eifel district. A thicket begins not far from this hill, and gradually extends until it merges into the forest beyond. The burning sun has dried up all the grass up to the edge of the thicket. There is so little rain here that the poor Xerophites are the only exception that can stand the drought. Only on the inner walls of the steep crater do bushes and shrubs grow, for these are only exposed at midday to the sun's heat.

Thus a cool moisture pervades this hollow except during the very hottest season. Paths, trodden down by crowds of game, lead to the shining mirror of the little lake. It used to be the haunt of beasts of prey, and the smaller animals would probably seek drinking-places miles distant rather than come to this grim declivity. There is, however, a kind of road leading to the summit of this hill, a very uneven road, wide at first, then gradually narrower and narrower, which had become almost impassable with grass and brushwood when I made my way up. This road was trodden by the cattle herds of the Masai. It may be that rhinoceroses and elephants were the original makers of it before the warlike shepherds began to lead their thirsty cattle to this secluded lake. Be this as it may, my Masai friends assured me that they

C. G. Schillings, *phot.*

brought their herds here time out of mind until the rinderpest devastated them.

For weeks I had had natives on the look-out for elephants. They could only tell me, however, of small herds composed of cows and young bulls, and that was not good enough from the point of view of either sportsman or photographer. However, I made several excursions round the Kilepo Hill from my camp, never taking more than a few men with me—it so often happens that one's followers spoil the chase, perhaps quite frustrate it. This is well known to natives and experienced elephant-hunters.

I soon became familiar with the district and its vegetation. For hours I followed paths which led through thick undergrowth, and I had some unpleasant encounters with rhinoceroses. I knew well that the neighbourhood of the hills, with its tall impenetrable growth, was a most likely one for astute and cautious bull-elephants to haunt.

Hunting elephants in this fashion, day after day, with only a few followers, is a delightful experience. It happens, perhaps, that one has to pass the night in the forest under the free vault of heaven, with the branches of a huge tree as shelter. The faint glow of the camp-fire fades and flickers, producing weird effects in the network of the foliage. How quickly one falls victim to atavistic terrors of the night! Terrors of what? Of the "pepo ya miti," the spirit of the woods, or of some other mysterious sprite? No, of wild animals—the same kind of fear that little children have in the dark of something unknown, dangerous and threatening. My followers betake themselves to their

slumbers with indifference, for they have little concern for probable dangers. But the imaginative European is on the look-out for peril—the thought of it holds and fascinates him. . . . Somewhere in the distance, perhaps, the heavens are illuminated with a bright light. Far, far away a conflagration is raging, devastating miles upon miles of the vale below. The sky reflects the light, which blazes up now purple, now scarlet! Often it will last for days and nights, nay weeks, whole table-lands being in flames and acting as giant beacons to light up the landscape! . . . My thoughts would turn towards the bonfires which in Germany of old flashed their message across the land—news, perhaps, of the burial of some great prince. . . . So, now, it seemed to me that those distant flames told of the last moments of some monarch of the wild.

At last I received good news. A huge bull-elephant had been seen for a few minutes in the early morning hours in the vicinity of the Kilepo Hill. This overjoyed me, for I was quite certain that in a few days now we should meet them above on the hill.

I left my camp to the care of the greater part of my caravan, but sent a good many of my men back into the inhabited districts of the northern Kilimanjaro to get fresh provisions from Useri. I myself went about a day's journey up Kilepo Hill, accompanied by a few of my men, resolved to get a picture *coûte que coûte*.

It was characteristic of my scouts that they could only give me details about elephants. As often as I asked them about other game I could get nothing out of them,

for what were giraffes, buffaloes, and rhinoceroses to them, and what interest could they have in such worthless creatures! The whole mind of the natives has been for many years past directed by us Europeans upon ivory. Native hunters in scantily populated districts dream and think only of "jumbe"—ivory, and always more ivory, as the Esquimaux yearns for seal blubber and oil and the European for gold, gold, gold! In these parts giraffes and rhinoceroses count for nothing in comparison with the elephant—the native thinks no more of them than one of our own mountaineers would think of a rabbit or a hare. Only those who have seen this for themselves can realise how quickly one gets accustomed to the point of view! In the gameless and populous coast districts the appearance of a dwarf antelope or of a bustard counts for a good deal, and holds out promise to the sportsman of other such game—waterbuck, perhaps. I have read in one of the coast newspapers the interesting news that Mr. So and So was fortunate enough to kill a bustard and an antelope. That certainly was quite good luck, for you may search long in populous districts and find nothing. As you penetrate into the wilder districts conditions change rapidly, and after weeks and months of marching in the interior you get accustomed to expecting only the biggest of big game. The other animals become so numerous that the sight of them no longer quickens the pulse.

I have already remarked that elephants are much less cautious by night than by day. The very early morning hours are the best for sighting elephants, before they retire into their forest fastnesses to escape the burning

rays of the sun. But as at this time of the year the sun hardly ever penetrated the thick bank of clouds, there was a chance of seeing the elephants at a later hour and in the bush. So every morning either I or one of my scouts was posted on one of the hills—Kilepo especially—to keep a sharp look-out. It needed three hours in the dark and two in the daylight to get up the hill. It was not a pleasant climb. We were always drenched to the skin by the wet grass and bushes, and it was impossible to light a fire to dry ourselves, for the animals would certainly have scented it. We had to stay there in our wet clothes, hour after hour, watching most carefully and making the utmost of the rare moments when the mist rolled away in the valley and enabled us to peer into the thickets. It may seem surprising that we should have found so much difficulty in sighting the elephants, but one must remember that they emerge from their mud-baths with a coating that harmonises perfectly with the tree-trunks and the general environment, and are therefore hard to descry. Besides, the conditions of light in the tropics are very different from what we are accustomed to in our own northern clime, and are very deceptive.

When fortune was kind I could just catch a glimpse during a brief spell of sunshine of a gigantic elephant's form in the deep valley beneath. But only for a few instants. The next moment there was nothing to be seen save long vistas of damp green plants and trees. The deep rain-channels stood out clear and small in the landscape from where I stood. The mightiest trees looked like bushes; the hundred-feet-high trunks of

C. G. Schillings, phot.

A VELT FIRE. THE BONES OF AN ELEPHANT SOON TO BECOME FOOD FOR THE FLAMES.

C. G. Schillings, phot.

A VELT FIRE.

decayed trees which stood up out of the undergrowth here and there looked like small stakes. In the ever-changing light one loses all sense of the vastness of things and distances.

For once the mist rolls off rapidly; a gust of wind drives away the clouds. The sun breaks through. Look! there is a whole herd of elephants below us in the valley! But in another second the impenetrable forest of trees screens them from my camera. At last they become clearly visible again, and I manage to photograph two cow-elephants in the distance. The sun vanishes again now, and an hour later I have at last the whole herd clearly before me in the hollow. How the little calves cling to their mothers! How quietly the massive beasts move about, now disappearing into the gullies, now reappearing and climbing up the hillside with a sureness of foot that makes them seem more like automatons than animals. Every now and again the ruddy earth-coloured backs emerge from the mass of foliage. A wonderful and moving picture! For I know full well that the gigantic mothers are caring for their children and protecting them from the human fiend who seeks to destroy them with pitfalls, poisoned arrows, or death-dealing guns. How cautiously they all move, scenting the wind with uplifted trunks, and keeping a look-out for pitfalls! Every movement shows careful foresight; the gigantic old leaders have evidently been through some dire experiences.

Suddenly a warning cry rings out. Immediately the whole herd disappears noiselessly into the higher rain-

channels of the hill—the "Subugo woods" of the Wandorobo hunters.

Had the elephants not got these places of refuge to fly to they would have died out long ago! This is the only means by which they are still able to exist in Africa. I feel how difficult it is to depict accurately the constant warfare that is going on between man and beast, and can only give others a vague idea of what it is like. Many secrets of the life and fate and the speedy annihilation of the African elephants will sink into the grave with the last commercial elephant-hunters. And once again civilisation will have done away with an entire species in the course of a single century. The question as to how far this was necessary will provide ample material for pamphlets and discussions in times to come.

When one knows the "subugo," however, one understands how it has been possible for elephants in South Africa to have held out so long in the Knysna and Zitzikama forests until European hunters began to go after them with rifles in expert fashion. Fritsch visited the Knysna forests in 1863. "It is easy," he says, "to understand how elephants have managed to remain in their forests for weeks together before one of their number has fallen, even when hundreds of men have been after them. There are spots in these forests—regular islands completely surrounded by water—where they take refuge, and where no one can get at them."

Of course, Fritsch speaks of a time when the art of shooting was in its infancy. One must not forget that

C. G. Schillings, phot.

AN OLD ACACIA TREE.

CITY OF WESTMINSTER
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nowadays ruthless marksmen will reach the mighty beasts even in these islands of refuge—marksmen who shoot at a venture with small-calibre rifles, and who find the dead elephant later somewhere in the neighbourhood, with vultures congregated round the corpse.[1]

Now perhaps I may have to wait in vain for hours, days, and even weeks! Some mornings there is absolutely nothing to be seen—the animals have gone down to the lake to drink, or have taken refuge in one of the little morasses at the foot of the hill. Judging by their nocturnal wanderings it seems as if they must have other accessible drinking-places in the vicinity. A search for these places, however, is not to be thought of. If I were to penetrate to these haunts they would immediately note my footsteps and take to flight for months, perhaps, putting miles between themselves and their would-be photographer.

For to-day, at any rate, all is over. The sun only breaks through the heavy masses of cloud for a few minutes at a time, and great sombre palls of mist hang over the forests, constantly changing from one shape to another.

To obtain a picture by means of the telephoto-lens did not seem at all feasible. But a photo of bull-elephants and giraffes together!—so long as there was the faintest chance of it I would not lose heart. It was not easy, but I *must* succeed! So, wet through and perishing with

[1] Experienced German hunters make a special plea for the use of rifles of heavier calibre. Many English hunters are of the same opinion.

cold, I wandered every morning through the tall grass to the top of the hill and waited and waited. . . .

The elephants seemed to have completely disappeared; no matter how far I extended my daily excursions, they were nowhere to be seen. At length I came across a fairly big herd, but they had taken up their stand in such an impenetrable thicket that it was quite impossible to sight them. After much creeping and crawling through the elephant and rhinoceros paths in the undergrowth I managed to get just for a few minutes a faint glimpse of the vague outline of single animals, but so indistinct that it was impossible to determine their age, size, or sex. In East Africa elephants are generally seen under these unfavourable conditions. Very seldom does one come upon a good male tusk-bearing specimen, as well-meaning but inexperienced persons, such as I myself was at one time, would desire.

There is something very exciting and stimulating in coming face to face with these gigantic creatures in the thick undergrowth. All one's nerves are strained to see or hear the faintest indication of the whereabouts of the herd; the sultry air, the dense tangle through which we have to move, and which hinders every step, combine to excite us. We can only see a few paces around. The strong scent of elephant stimulates us. The snapping and creaking of branches and twigs, the noises made by the beasts themselves, especially the shrill cry of warning given out from time to time by one of the herd—all add to the tension. The clanging, pealing sound of this cry has something particularly weird in it in the

THE TWO ELEPHANTS.

C. G. Schillings, phot.

THE TUSKS OF THE ELEPHANTS SEEMED EVEN LARGER THAN THEY REALLY WERE, AND OUT OF ALL PROPORTION TO THE SIZE OF THE ELEPHANTS, THOUGH THESE WERE EXCEPTIONALLY BIG BEASTS, NEARLY 12 FEET IN HEIGHT. THE GIRAFFE COMES OUT CURIOUSLY IN THIS PICTURE, RIGHT AT THE BOTTOM.

[p. 540

stillness of the great forest. At such a signal the whole herd moves forward, to-day quietly without noise, and to-morrow in wild blustering flight. It is very seldom that one can catch them up on the same day, and then only after long hours of pursuit. . . . These forest sanctuaries, together with their own caution, have done more to stave off the extermination of the species than have all the sporting restrictions that have been introduced.

Every morning I returned to my post of observation on the hill. I could easily have killed one or other of the herd. But I did not wish to disturb the elephants, and I had also good reason for believing that there were no very large tusks among them. Morning after morning I returned disappointed to my camp, only to find my way back on the next day to my sentry-box at the edge of the forest on the hill. Days went by and nothing was seen save the back or head of an elephant emerging from the "subugo." This "subugo" knows well how to protect its inmates.

Every morning the same performance. At my feet the mist-mantled forest, and near me my three or four blacks, to whom my reluctance to shoot the elephants and my preoccupation with my camera were alike inexplicable. Whenever the clouds rolled away over the woods and valley it was necessary to keep the strictest watch. Then I discovered smaller herds of giraffes with one or two elephants accompanying them. But this would be for a few seconds only. The heavy banks of cloud closed to again. A beautiful large dove (*Columba aquatrix*) flew about noisily, and like our ringdove, made its love-flights round about the hill, and cooed its deep notes close by. Down below

in the valley echoed the beautiful, resonant, melancholy cry of the great grey shrike; cock and hen birds answered one another in such fashion that the call seemed to come from only one bird. There was no other living thing to see or hear.

But now! At last! I shall never forget how suddenly in one of the brilliant bursts of sunshine the mighty white tusks of two bull-elephants shone out in the hollow so dazzlingly white that one must have beheld them to understand their extraordinary effect, seen thus against that impressive background. Close by was a bull-giraffe. Vividly standing out from the landscape, they would have baffled any artist trying to put them on the canvas. I understood then why A. H. Neumann, one of the most skilful English elephant-hunters, so often remarked on the overwhelming impression he received from these snow-white, shining elephant-tusks. So white do they come out in the photographs that the prints look as though they had been touched up. But these astonishing pictures are as free from any such tampering as are all the rest of my studies of animal life.[1]

Before I succeeded in getting my first picture of the elephants and giraffes consorting together, I was much tempted to kill the two huge bull-elephants. They came so often close to the foot of my hill that I had plenty of opportunities of killing them without over-much danger to

[1] The *raison d'être* of these powerful weapons of the African elephant is a difficult question. Why did the extinct mammoth carry such very different tusks, curving upwards? Why has the Indian elephant such small tusks, and the Ceylon elephant hardly any at all, whilst the African's are so huge and heavy?

C. G. Schillings, phot.

THE TWO ELEPHANTS.

C. G. Schillings, phot.

A QUAINT COMPANIONSHIP—ELEPHANT AND GIRAFFE. THE GIRAFFE MAY BE JUST MADE OUT IN THE FOREGROUND, AT THE BOTTOM OF THE PHOTOGRAPH.

myself or my men. As I caught sight of that rare trio I must honestly confess I had a strong desire to shoot. This desire gave way, however, before my still keener wish to photograph them. The temptation to use my rifle came from the thought of the satisfaction with which I should see them placed in some museum. It might be possible to prepare their skins here on this very spot. In short, I had a hard struggle with myself.

But the wish to secure the photographs triumphed. No museum in the world had ever had such a picture. That thought was conclusive.

The accompanying illustrations give both the colossal beasts in different attitudes. The giraffe stands quite quiet, intent on its own safety, or gazes curiously at its companions. What a contrast there is between the massive elephants and the slender, towering creature whose colouring harmonises so entirely with its surroundings! Wherever you see giraffes they always blend with their background. They obey the same laws as leopards in this respect, and leopards are the best samples of the "mimicry" of protective colouring.

What long periods of hunger must have gone to the formation of the giraffe's neck!

It would seem as though these survivors of two prehistoric species had come together thus, at a turning-point in the history of their kind, for the special purpose of introducing themselves by means of their photographs to millions of people. I owe it to an extraordinary piece of good fortune that I was able to take another picture of them during a second burst of sunshine which lit up the forest.

It is the event of a lifetime to have been the witness of so strange and unsuspected a condition of things as this friendship between two such dissimilar animals. The extent of my good luck may be estimated from the fact that the famous traveller Le Vaillant, more than seventy years ago, wished so ardently to see a giraffe in its natural surroundings, *if only once*, that he went to South Africa for that purpose, and that, having achieved it on a single occasion, as he relates in his work, he was quite overjoyed. Although I was aware that herds of giraffes frequented this region without fear of the elephants, it was a complete revelation to me to find an old bull-giraffe living in perfect harmony for days together with two elephants for the sake of mutual protection. I can only account for this strange alliance by the need for such mutual protection. The giraffe is accustomed to use its eyes to assure itself of its safety, whilst elephants scent the breeze with their trunks, raised like the letter S for the purpose. In these valleys the direction of the wind varies very often. The struggle for existence is here very vividly brought before us. How often in the course of centuries must similar meetings have occurred in Africa and in other parts of the world, before I was able to record this observation for the first time? These pictures are a good instance of the value of photography as a means of getting and giving information in regard to wild life.

Kilepo Hill will always stand out vividly in my memory. Elephants may still climb up to the small still lake shut in by the wall-like hillsides, as they have done for ages, to quench their thirst at its refreshing waters. For hundreds

of years the Masai, for the sake of their cattle herds, contested with them the rights of this drinking-place. Then the white man came and the Masai vanished, and again the elephants found their way to the Kilepo valley. Later, white settlers came—Boers, ruthless in their attitude towards wild life—and took up their abode in the Kilimanjaro region, The day cannot now be far distant when the last of the elephants will have gone from the heart of Kilepo Hill. But these two, long since killed, no doubt, will continue to live on in my pictures for many a year to come.

THE YOUNG LION THAT I MANAGED TO CAPTURE AND BRING ALIVE INTO CAMP.

A STUDY IN PROTECTIVE "MIMICRY."

XIII

A Vanishing Feature of the Velt

"WHEN men and beasts first emerged from the tree called 'Omumborombongo,' all was dark. Then a Damara lit a fire, and zebras, gnus, and giraffes sprang frightened away, whilst oxen, sheep, and dogs clustered fearlessly together." So Fritsch told us forty years ago, from the ancient folk-lore of the Ova-Herero, one of the most interesting tribes of South-West Africa.

If the photographing of wild life is only to be achieved when conditions are favourable, and is beset with peculiar difficulties in the wilderness of Equatorial Africa, one might at least suppose that such huge creatures as elephants, rhinoceroses, and giraffes could be got successfully upon the "plate." But they "spring frightened away"! The cunning, the caution, and the shyness of these animals make all attempts at photographing them very troublesome

C. G. Schillings, phot.

A GIRAFFE IN FULL FLIGHT.

C. G. Schillings, phot.

A GIRAFFE BULL IN AN ACACIA GROVE.

indeed; for to secure a good result you need plenty of sunlight, besides the absence of trees between you and the desired object. And when everything seems to favour you, there is sure to be something wanting—very probably the camera itself. Fortune favours the photographer at sudden and unexpected moments, and then only for a very short while. One instant too late, and you may have to wait weeks, months, even years for your next opportunity. I would give nine-tenths of the photos I have taken of animal life for some half-dozen others which I was unable to take because I did not have my camera to hand just at the right moment. Thus it was with the photographing of the three lions I killed on January 25, 1897, and of the four others I saw on the same day, on the then almost unknown Athi plains in the Wakikuju country. Also with that great herd of elephants which so nearly did for me, and which I should have dearly liked to photograph just as they began their onrush. (I have told the story in *With Flashlight and Rifle*.) I remember, too, the sight of a giraffe herd of forty-five head which I came across on November 4, 1897,[1] about two days' journey north-west of the Kilimanjaro. The hunter of to-day would travel over the velt for a very long while before meeting with anything similar. In earlier days immense numbers of long-necked giraffe-like creatures, now extinct, lived on the velt; the rare Okapi, that was discovered in the Central African forests a short time ago, has aroused the interest of zoologists as being a relative of that extinct species.

Within the last hundred or even fifty years, the

[1] On that occasion I had not at hand a telephoto-lens of sufficient range.

giraffe itself was to be found in large herds in many parts of Africa. The first giraffe of which we know appeared in the Roman arena. About two hundred years ago we are told some specimens were brought over to Europe, and caused much astonishment. The Nubian menageries some years ago brought a goodly number of the strange beasts to our zoological gardens.[1] But how many people have seen giraffes in their native haunts? When, in 1896, I saw them thus for the first time, I realised how thin and wretched our captive specimens are by the side of the splendid creatures of the velt. Le Vaillant, in his accounts of his travels in Cape Colony and the country known to-day as German South-West Africa, gives a spirited description of these animals, and tells how after much labour and trouble he managed to take a carefully dried skin to the coast and to send it to Germany. That was seventy years ago. Since then many Europeans have seen giraffes, but they have told us very little about them. The German explorer Dr. Richard Böhm has given us wonderfully accurate information about them and their ways. But the beautiful water-colours so excellently drawn by a hand so soon to be disabled in Africa, were lost in that dreadful conflagration in which his hunting-box on the peaceful Wala River and most of his diaries were destroyed. Dr. Richard Kandt, whilst on his expeditions in search of the sources of the Nile, found the charred remains of the hut. "Ubi sunt, qui ante nos in mundo fuere?"

Zoological experts tell us that there are several species

[1] The well-known naturalist, Hagenbeck, remembers the immense numbers of giraffes which were bagged in the Sudan some thirty years ago.

C. G. Schillings, phot.

A SUCCESSFUL PHOTOGRAPH, TAKEN AFTER A LONG PURSUIT AND MANY FAILURES.

C. G. Schillings, phot.

TELEPHOTO STUDIES OF GIRAFFES (*GIRAFFA SCHILLINGSI,* Mtsch.).

of giraffe inhabiting separate zoological regions. In the districts I traversed, I came across an entirely new species. . . . Their life and habits interested me beyond measure. I often think of them still—moving about like phantoms among the thorny bushes, and in and out the sunlit woods, or standing out silhouetted against the horizon.

Though by nature peaceful, the giraffe is not defenceless—a kick from one of its immense legs, or a blow sideways with the great thick-necked head of a bull, would be quite enough to kill a mere man. But this gigantic beast, whose coat so much resembles that of the bloodthirsty tiger, leopard, and jaguar, never attacks, and only brings its forces into play for purposes of defence. It harms no man, and it has lived on the velt since time immemorial. It is the more to be deplored, therefore, that it should disappear now so quickly and so suddenly.

I have already remarked several times on the way giraffes and other African mammals harmonise in their colouring with their environment. Professor V. Schmeil has pointed out how my opinion in this respect accords with that of earlier observers.[1] The way in which giraffes mingle with their surroundings as regards not only their colour but also their form, is especially astonishing. The illustration on page 550 proves this in a striking manner, for it shows how the outlines of the giraffe correspond exactly with those of the tree close to it.

[1] Later observers questioned this fact. When I have used the word "mimicry," I have done so not in the original sense of Bates and Wallace, but as denoting the conformity of the appearance of animals with their environment.

One may spend days and weeks on the velt trying to get near giraffes without result. Far away on the horizon you descry the gigantic "Twigga"—as the Waswahili call it—but every attempt to approach is in vain. Then, all of a sudden it may happen—as it did once to me near the Western Njiri marshes, Nov. 29, 1898—that a herd of giraffes passes quite near you without fear. On the occasion in question, as is so often the case, I had not my photographic apparatus at hand. I could have got some excellent pictures with quite an ordinary camera. The giraffes came towards me until within sixty paces. They then suddenly took wildly to flight. The little herd consisted of nine head: an old very dark-spotted bull, a light-spotted cow, three younger cows with a calf each, and finally a young dark-spotted bull. Orgeich and I had been able to observe the animals quietly as they stood, as if rooted to the spot, with their long necks craned forward, their eyes fixed upon us.[1] I cannot explain why the animals were so fearless on that occasion. It was a most unusual occurrence, for ordinarily giraffes manage to give the sportsman a wide berth.

Again, it may happen, especially about midday, that the hunter will sight a single giraffe or a whole herd at no very great distance. At these times, if one is endowed with good lungs and is in training, one may get close enough to the creatures before they take to flight.

[1] Some years earlier one of our best zoologists, after a long stay in the Masai uplands, had described the giraffes as "rare and almost extinct": a striking proof of the great difficulty there is in coming upon these animals.

Hauptmann Merker, phot.

GIRAFFE STUDIES.

C. G. Schillings, phot.

GIRAFFE STUDIES.

Or it may happen that you will sight giraffes about noontide sheltering under the fragrant acacia trees. I remember one occasion especially, in the neighbourhood of the Gelei volcanic hills. I had hardly penetrated for more than about a hundred and twenty paces into an acacia wood, when I suddenly saw the legs of several gigantic giraffes—their heads were hidden in the crowns of mimosa. The wind was favourable. I might within a few minutes find myself in the middle of the herd! But, a moment later, I felt the ground tremble and the huge beasts with their hard hoofs were thumping over the sun-baked ground. They crashed through the branches and fled to the next shelter of mimosa trees. Although I might easily have killed some of them, it was absolutely impossible to take a photograph. But I was at times more fortunate in snapshotting single specimens. Carefully and cautiously, I would creep forward, of course alone, leaving my people behind, until I came within about twenty paces of the giraffe. By dodging about the trees or shrubs near which it stood I have sometimes managed to obtain good pictures of the animal making off in its queer way. The utmost caution was necessary. I had to consider not only the place where the animal was but the position of the sun, and that most carefully. The possibility of photographing giraffes with the telephoto lens is very slight indeed. One's opportunities are turned to best account by the skilful use of an ordinary hand-camera.

In this way, also, I managed to get pictures of the peculiar motion of giraffes in full flight. My negatives are a proof of the comparative ease with which native

hunters may hunt giraffes with poisoned arrows. I have often met natives in possession of freshly killed giraffe flesh.

In most cases bushes and trees are a great hindrance to the taking of photographs, especially of large herds. At such times it was as good as a game of chess between the photographic sportsman and the animals. For hours I have followed them with a camera ready to snapshot, but the far-sighted beasts have always frustrated my plans. Thus passed hours, days and weeks. But good luck would come back again, and I was sometimes able to develop an excellent negative in a camp swarming with mosquitoes.

It is especially in the peculiar light attendant on the rainy season and amidst tall growths that giraffes mingle so with their surroundings. It is only when the towering forms are silhouetted against the sky that they can be clearly seen on the open velt. At midday, when the velt is shimmering with a thousand waves of light, when everything seems aglow with the dazzling sun, even the most practised eye can scarcely distinguish the outlines of single objects. By such a light the sandy-coloured oryx antelopes and the stag-like waterbuck look coal-black ; the uninitiated take zebras for donkeys—they appear so grey—and rhinoceroses resting on the velt for ant-hills. But giraffes especially mingle with the surrounding mimosa woods at this hour in such a way as only those who have seen it could believe possible.

When you see these animals in their wild state, your thoughts naturally revert to the penned-up tame specimens in zoological gardens or those preserved in museums.

C. G. Schillings, phot.

A HERD OF GIRAFFES: THE LEADER, A POWERFUL OLD BULL, IN THE FOREGROUND.

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C. G. Schillings, phot.

TWO GIRAFFES OUT OF A HERD I CAME UPON IN THE VICINITY OF THE MASAI COLONY CALLED KIRARAGUA, NOW ALMOST BEREFT OF WILD LIFE OWING TO THE IMMIGRATION OF THE BOERS. THE ANIMALS MAY HERE BE SEEN IN VERY CHARACTERISTIC SURROUNDINGS, ACACIA WOODS ALTERNATING WITH WIDE EXPANSES COVERED WITH BOWSTRING HEMP.

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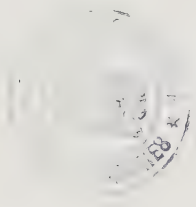
HEAD OF A GIRAFFE (*GIRAFFA RETICULATA* De Winton), KILLED IN SOUTH SOMALILAND BY THE EXPLORER CARLO VON ERLANGER. (BY KIND PERMISSION OF THE BARONESS VON ERLANGER.)



Well do I remember that the first wild zebra I saw looked to me little like a tame specimen in a zoological garden.

The death-knell of the giraffe has tolled. This wonderful and harmless animal[1] is being completely annihilated! Fate has decreed that a somewhat near relative should be discovered in later days—namely the Okapi, which inhabits the Central African forests. It may be safely asserted that these unique animals will exist long after the complete extermination of the real giraffe. The species of giraffe, however, which has been dying out in the north and south of the African continent will be represented in the future by pictures within every man's reach. Every observation as to their habits, every correct representation obtained, every specimen preserved for exhibition is of real value. And this I would impress on every intelligent man who has the opportunity of doing any of these things out in the wild.

Professor Fritsch saw giraffes in South Africa as late as 1863. Shortly before these lines were printed he gave a glowing account of the impression they then made on him, an impression which was renewed when he saw my pictures.

Large herds of giraffes still flourish in remote districts. My friend Carlo von Erlanger, whose early death is much to be regretted, found the animals particularly timid in South Somaliland when he traversed it for the first time.

[1] The author has often heard it asserted that the giraffe does much harm to the African vegetation and therefore should be exterminated. Such assertions should be speedily and publicly denied. They are on a level with the demand for the complete extermination of African game with a view to getting rid of the tsetse-fly.

A fine stuffed specimen of these beautifully coloured giraffes is to be found in the Senckenberg Museum in Frankfort-on-Maine. An illustration gives the head of a giraffe killed by my late friend, and proves to the reader how much the two species differ—namely the South Somaliland giraffe as here depicted,[1] and that which I was the first to discover in Masailand. We have in Erlanger's diary and in this illustration the only existing information about the presence of the giraffe in South Somaliland, a region which none but my daring friend and his companions have so far traversed.

Hilgert, Carlo von Erlanger's companion, mentions the frequent presence of the South Somali giraffe, but says that they showed themselves so shy that the members of the expedition generally had to content themselves with the numerous tracks of the animals or with the sight of them in the far distance.

Meanwhile an effort is being made to save and protect what remains of the giraffe species in Africa. But there is little hope of ultimate success. I do trust, however, that a wealth of observations, illustrations, and specimens may be secured for our museums before it is too late. In this way, at least, a source of pleasure and information will be provided for future generations, and the giraffe will not share the fate of so many other rare creatures which no gold will ever give back to us.

With sad, melancholy, wondering eyes the giraffe seems to peer into the world of the present, where there is room for it no longer. Whoever has seen the expression in

[1] *Giraffa reticulata* de Winton and *Giraffa schillingsi*, Mtsch.

Hauptmann, Merker phot.

GIRAFFE STUDY.

C. G. Schillings, phot.

A TELEPHOTOGRAPH TAKEN AT A DISTANCE OF 200 PACES.

C. G. Schillings, phot.

GIRAFFA SCHILLINGSI, Mtsch.

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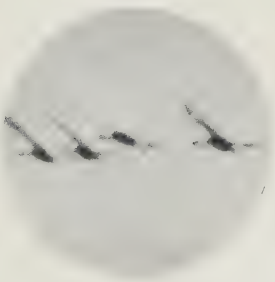
those eyes, an expression which has been immortalised by poets in song and ballad for thousands of years, will not easily forget it, any more than he will forget the strong impression made on him when he looked at the "Serafa" of the Arabs in the wilderness.

The day cannot be far distant when the beautiful eyes of the last "Twigga" will close for ever in the desert. No human skill will be able to prevent this, in spite of the progress of human knowledge and human technique. The giraffe can never enter the little circle of domesticated animals. Therefore it must go. Perhaps its eyes will close in the midst of the Elelescho jungle, thus lessening still further the fascination of that survival from the youth of the world.



CRESTED CRANES ON THE WING.

HUNGRY VULTURES IN THE VICINITY OF MY CAMP.

XIV

Camping out on the Velt

AMONG the happiest days of my life I reckon those which I spent camping out in the heart of the Nyíka.

Nearly every hour there had something fresh to arouse my interest, not only in the life of the wild animals that roamed at large all about, but also in that of the specimens which I had caught or my men had brought to me, and whose habits and ways I could observe within the enclosure of the camp. Of course our unique menagerie could not boast members of all the most attractive species of the African fauna, but it included some very rare and interesting animals which Europe has never seen. To know these one must go and live in wildest Africa and see them at home.

My camp at times was like a little kingdom. Many of my people went out for weeks together to barter for

C. G. Schillings, phot.

PITCHING CAMP WITH A VIEW TO A LONG STAY.

fruits and vegetables with agrarian tribes. With the rest, I spent my days out in the open, hunting, collecting, and observing. My zoological collection increased daily, time flew by with all the many jobs there were to be done—drying, preserving, preparing, sorting, labelling, and sending off specimens. The primitive camp life was full of interest in spite of its seeming monotony. It was like

MY TAXIDERMIST, ORGEICH, AT WORK.

ruling and ordering a little State. I thoroughly enjoyed this simple existence, in which I seemed to forget the artificial worries of civilisation and to be able to give myself up to my love for nature.

Then I learned to appreciate the natives. Of course they are not to be judged from a European standpoint as regards habits and customs, but I shall always remember

with pleasure certain strong and good characters among my followers.

Nomadic hunters—shy and suspicious as the animals they hunted—sometimes paid us passing visits, whilst the whole world of beasts and birds thronged around our "outpost of civilisation," so suddenly planted in their midst.

My goods and chattels were stowed away in a hut which I had put up myself, and which was protected from wind, rain, and sun by masses of reeds and velt grasses. This hut was of the simplest construction, but I was very proud of it. It was useful not only for protecting zoological collections from the all-pervading rays of the sun, and from rain and cold, but also from the numerous little fiends of insects against which continual warfare has to be waged. The destructive activity of ants is a constant source of annoyance to travellers and collectors; I remember how my one-time fellow-traveller Prince Johannes Löwenstein had the flag on his tent destroyed by them in a single night. In one night also these ants bit through the ticket-threads by which my specimens were classified; in one night, again, the tiny fiends destroyed the bottoms of several trunks which had been carelessly put away!

One has to wage constant warfare against destroyers of every kind.

My cow, which was very valuable to me, not only as giving milk to my people, but also for nourishing young wild animals, was penned at night-time within a thick thorn hedge. My people made themselves more or less

C. G. Schillings, phot.

TERMITEN ANT-HILLS.

skilfully constructed shelters under the bushes and trees. Thus a miniature village grew up, of which I was the despotic ruler. The native hunters who visited us would sometimes accompany me on long expeditions.

For me there are no "savages." When an intelligent man comes across a tribe hitherto unknown to him he will carefully study their seemingly strange habits, and thus will soon recognise that they have their own customs and laws which they regard as sacred and immutable, and which order their whole existence. He will no longer desire the natives to adopt the manners and customs of the white man, for which they are absolutely unsuited.

But by the time I got friendly with these nomads they were off again. It is against their habits to stay long in one place, and they do not willingly enter into close relations with a European—or indeed with any one. Suddenly one fine morning we find their sleeping quarters empty; they have disappeared, never to return. No obligation, no command, would ever bind these wanderers to one place. Children of the moment, children of the wilderness, their lives are spent in constant roaming.

I hardly ever had a leisure hour, for there was much to arrange and see to in my camp. I had many functions to perform. I was my own commissioner of public safety; I looked after the commissariat; I was doctor and judge. I supervised all the other offices and pursued a number of handicrafts. Like Hans Sach I followed with pride the avocations of shoemaker, tailor, joiner, and smith, my very scanty acquaintance with all these various trades being put to

astonishingly good use. I was like the one-eyed man among the blind.

What judgments of Solomon have I not given! Once two of my best people quarrelled, an Askari and his wife. The serious character of the quarrel could be estimated from the noise of weeping and the sound of blows that had proceeded from their tent. The man wished to separate from his wife.

"Why did you beat your wife last night?"

The Askari (who has served under both German and English masters) stands to attention.

"Because she was badly behaved—I will not keep her any more—I am sending her away."

"But why—rafiki yangu?—my friend? Such things will happen at times, but it is not always so bad—see? Who will look after you? who will prepare your meals? Look at her once more; she is very pretty—don't you think so? And she cooks very well" (both parties, as well as the bystanders, are smiling by now). "Go along, then, and make friends."

And they go and make friends.

A deputation of the Waparis come to the camp. They crouch down near my tent and beg for a "rain charm" to bring down showers upon their fields. It is somewhat difficult to help them. I take the gifts which they bring to pay for the charm and make them a more valuable return, and by means of the barometer I am able to foretell rain. They gaze at the wizard and his charm wonderingly, and come again later to see them both.

Countless similar events succeed one another, and ever

AN UNUSUALLY LARGE ANT-HILL. INSIDE THIS STRONGHOLD THE "QUEEN" ANT IS TO BE FOUND WALLED UP IN A SMALL CELL. SHE IS CONSIDERABLY LARGER THAN THE OTHER ANTS AND DEVOTES HERSELF EXCLUSIVELY TO HER TASK OF LAYING EGGS. THE KING ON THE OTHER HAND, NOT MUCH LARGER THAN THE REST, IS IN COMMAND OF THE "WORKERS" AND THE SOLDIERS.

MY FELLOW TRAVELLER PRINCE LÖWENSTEIN, WHOSE TENT WAS ONCE ENTIRELY DESTROYED BY ANTS IN A SINGLE NIGHT.

the everyday monotony of the simple camp life has its delights.

Day by day my menagerie increases. To-day it is a

young lion I add to it, to-morrow a hyena, a jackal, a monkey, a marabou, geese, and other velt-dwellers, all of which I instal as members of my little community and try to become friends with. My efforts have sometimes been amply rewarded. Once during the early morning hours we discovered a large troop of baboons. It was cool: the

THE ANT-HILLS ARE SO STRONGLY BUILT AND SO HARD THAT THEY OFFER AN EXTRAORDINARILY STRONG RESISTANCE TO ALL EFFORTS TO DESTROY THEM BY PICK AND SHOVEL.

cold, damp morning mist grew into a drizzling rain; the animals huddled up closely together for the sake of warmth. Later they came down to seek their food. Cautiously we posted ourselves as if we had not noticed the monkeys. But remembering their long sight, I organised a battue, which succeeded admirably and secured me several young ones. At first the comical creatures obstinately withstood

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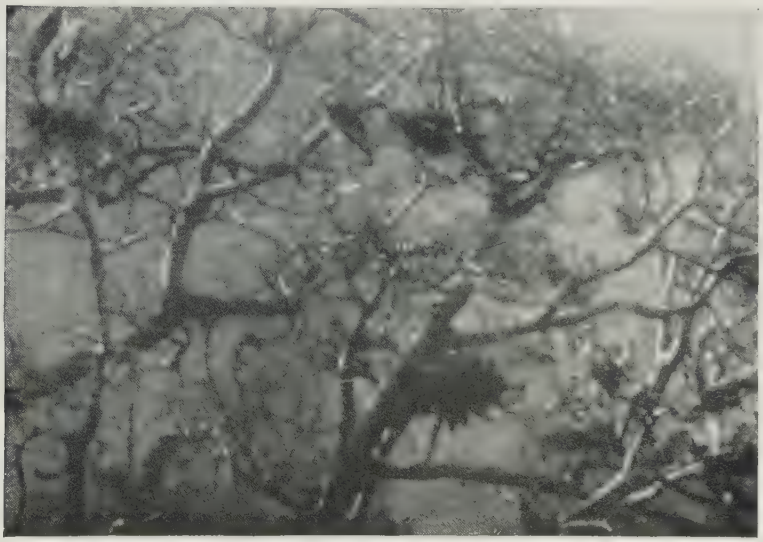
"POSCHO! POSCHO!" MY CARAVAN-LEADER HANDING OUT PROVISIONS.

BEARER'S WIFE GETTING READY THE EVENING MEAL.

MY YOUNG BABOONS IN FRONT OF MY TENT.

YOUNG OSTRICHES.

all efforts to tame them. Soon, however, they got to recognise their attendant, and became attached to him. Unlike other species of monkeys, baboons are full of character. Like some dogs, they are devoted to their masters but antagonistic to other people. They show their dislike for strangers very clearly. I was always much touched, when I came back from a long tramp on the velt,



MARABOU NESTS.

to be met with outbursts of joy by my chained-up baboons. They recognised their master in the far distance, reared themselves on their hind legs, and gave demonstrations of joy in every possible way as they saw him approaching.

Sometimes, too, other inmates of my camp evinced their pleasure at my appearance. This was especially the case with a marabou which I had caught when fully

grown. As he had been slightly hurt in the process of capture, I tended him myself most carefully, and experienced great satisfaction on his restoration to health. From the time of his recovery the bird was faithful to me, and did not leave the camp any more, although he was only caged at night-time! He attached himself to my headman, and tried to bite both men and beasts whom he considered as not to be trusted, and generally sat very solemnly in the vicinity of my camp and greeted me on my home-comings by wagging his head and flapping his wings. Such a clatter he made as he gravely rushed backwards and forwards! Not until I caressed him would he be quiet. After a time he began to build himself a nest under the shade of a bush quite close to my tent. The dimensions of this nest gradually increased in an extraordinary manner. This eyrie he defended to the utmost, and would not allow my blacks to go near it, or any of his animal companions. Great battles took place, but he always made his opponents take to their heels, and even the poor old donkey, if it happened to come his way. On the other hand, he was very friendly with my young rhinoceros. It was an extraordinary sight to see the rhinoceros with its friends, the goats and the solemn bird. Two fine Colobus monkeys, three young lions, young ostriches, geese, and various other creatures made up my little zoological garden. They all were good friends among themselves and with my tame hens, which used to prefer to lay their eggs in my tent and in those of the bearers. Sometimes I used to entrust some francolin eggs to

C. G. Schillings, phot.

ONE OF MY MARABOUS, NOW IN THE BERLIN ZOOLOGICAL GARDENS, BUILT A GREAT NEST IN MY CAMP.

C. G. Schillings, phot.

TWO DENIZENS OF THE VELT WHO BECAME MEMBERS OF MY CAMP AND ARE NOW IN THE BERLIN ZOOLOGICAL GARDENS.

C. G. Schillings, phot.

A RATHER MIXED-UP PHOTOGRAPH! MY YOUNG RHINOCEROS, WITH HER TWO COMPANIONS THE GOAT AND THE KID.

these hens. (Hardly any of the many beautiful East African species of francolins have so far been brought alive to Europe.) Once I had for weeks the pleasure of seeing some beautiful yellow-throated francolins (*Pternistes leucosepus infuscatus*, Cab.) running about perfectly tame among the other animals in camp.

I was often able to contemplate idyllic scenes among my quaint collection of animals. The behaviour of my baby rhinoceros interested me greatly. It was the pet of my caravan, and I was very proud of having reared it, for I had longed for two years for such a little creature, and had made many vain attempts to obtain one. Its friendship with two goats I have already mentioned in my previous book. They formed a strange trio. Very often the kid used the rhinoceros as a cushion, and all three were inseparable. The beast and the two goats often made little excursions out into the immediate neighbourhood of my camp. At these times they were carefully guarded by two of my most trustworthy people. The "rhino" was provided with its accustomed vegetable foods. When the little beast was in a good humour it would play with me like a dog, and would scamper about in the camp snorting in its own peculiar way. Such merry games alternated with hours of anxiety, d[illegible] which I was obliged to give my foster-child foc[illegible] medicine with my own hands, and to fight the c[illegible] (*Sarcopsylla penetrans*, L.), commonly called "jiggers," those horrible tormentors which Africa has received from America.

In the evening my flocks and herds of sheep, goats

and cattle came home, and among them some gnus which I had been able to obtain from an Arab through the friendly help of Captain Merker. It reminded one of pictures of old patriarchal days to see the animals greet their expectant calves and kids. It was always interesting, too, to watch the skilful handling of the cattle by the Masai herdsmen. The cows in Africa all come from Asia, and belong to the zebu family. They will only give milk when their calves have first been allowed to suck. Only then can the cow be milked, and that with difficulty, whilst a second herdsman holds the calf for a while a little distance off. Thus it was I obtained, very sparingly at first, the necessary milk for my young rhinoceros. Some days there was a grand show of varied animal life. Cows, bullocks, sheep, goats, my rhinoceros, young lion-cubs, hyenas, jackals, servals and monkeys, hens, francolins and marabou, geese, and other frequenters of the velt were in the camp, some at liberty and some chained, which caused many little jealousies and much that was interesting to notice.

My kitchen garden was invaded by tame geese and storks, which lived on the best of terms with the cook. It was irresistibly funny to see the sage old marabou acting as cook's assistant, gravely crouching near him and watching all his movements. Very often the tame animals in my camp had visitors in the shape of wild storks and geese, which came and mixed among the others, so that often one could not distinguish which were wild and which tame. We could see all kinds of

C. G. Schillings, phot.

—AS SHE WAS IN MY VELT CAMP.

C. G. Schillings, *phot.*

MY RHINOCEROS AS SHE IS TO-DAY IN THE BERLIN "ZOO," AND—

animals coming close to the camp. I have even followed the movements of rhinoceroses with my field-glasses for some time.

Some of my captives were not to be tamed at any price. We had a young hyena, for instance, which struggled obstinately with its chain. On the other hand, some hyenas, especially spotted ones, became so domesticated that they followed me about like dogs.

A young lion which I had had in my camp for some time, and which had grown into quite a fine specimen, often made itself so noticeable at night that, as my watchman told me, it was answered by other lions from outside. This made it necessary to take active precautions for the night, and my menagerie was brought into the centre of my camp for greater safety.

Many of the friendships which I formed with my *protégés* have been kept up. My marabou still remembers me, and greets me with great joy in his cage in the Berlin Zoological Garden, much to the irritation of his neighbour in the cage next door. I have no need to avoid the grip of his powerful beak, which the keeper has learnt to fear. He has never used this weapon against me. In whatever dress I may approach him he always recognises me, and greets me with lively demonstrations of pleasure. Even the rhinoceros seems to recognise his one-time master, although one cannot be quite sure of this in so uncouth a creature.

It is very difficult to know how to manage a rhinoceros. It was quite a long time before I succeeded in discovering its best diet. Young rhinoceroses almost always succumb

in captivity, though seemingly so robust. We have not yet succeeded in bringing an elephant from German or British East Africa to Europe, or indeed any of the other animals, such as giraffes and buffaloes and antelopes, which live in the same districts. It appears that it is just these interesting wild animals which are the most difficult to accustom to captivity and to keep alive. The attempt to bring home alive a couple of the wonderful Kilimanjaro Colobus apes (*Colobus caudatus*, Thos.) resulted in one of the monkeys dying a few days after my arrival; the other lived for two years only, and was the sole specimen of its kind ever seen in Europe. Every zoologist and lover of animals who goes into the colonies has a wide field of activity open before him in this respect. If only more people could be made to take an interest in these things we might buoy ourselves up with the hope of obtaining and keeping some of the best and rarest specimens of African animal life, perhaps even a full-grown gorilla from the West Coast—perhaps even an Okapi!

I was only able to keep my little menagerie together for a few weeks at a time, as I had to be constantly setting out on fresh expeditions. On these occasions I was accustomed to leave the animals in some village under the care of trustworthy blacks, so that I could take them again on my return journey to the coast. The weeks and months I spent in camp with my animals were a great source of pleasure to me. At night-time there were occasions when "rhinos" and "hippos" paid us visits, as could be plainly seen by the tracks found

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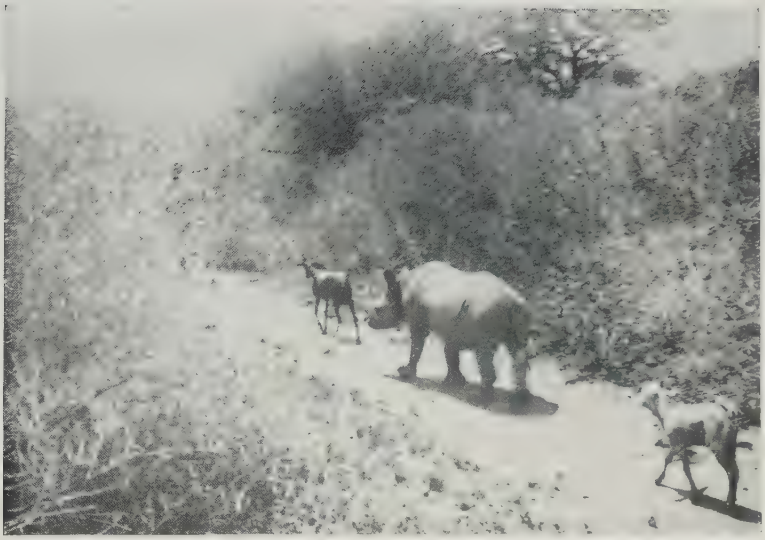
HOW MY CAPTIVE YOUNG "RHINO" WAS CARRIED TO CAMP.

CARRYING A DEAD LEOPARD, TO AN ACCOMPANIMENT OF IMPROVISED SONGS.



"FATIMA" (AS I CHRISTENED MY "RHINO") AND HER TWO COMPANIONS ON THEIR WAY TO THE COAST.

A YOUNG HYENA, WHICH I HAD EXTRACTED FROM ITS LAIR, RESISTED AT FIRST ALL EFFORTS AT TAMING IT.

the next morning.[1] Hyenas and jackals came very often, and even lions sometimes came to within a short distance of the camp. Thus my zoological garden, in spite of its size, could well boast of being, so to speak, the most *primitive* in the world.

But we had our anxious moments. Death levied its toll among my people, and the continual rumours of uprisings and attacks from outside gave plenty to talk about during the whole day, and often far on into the night over the camp-fire. When one of these charming African moonlit nights had set in over my homestead, when the noise of the bearers with their chatter and clatter had ceased, and my work, too, was done, then I used to sit awhile in front of the flickering flames and think. Or I would wander from fire to fire to exchange a few words with my watchmen, to learn their news and their wishes and to ask much that I wanted to know. This is the hour when men are most communicative, and unless there be urgent need of sleep the conversation may continue far into the night.

There is something strangely beautiful about those nights in the wilderness. My thoughts go back to an encampment I once made at the foot of the volcanic mountain of Gelei, close to a picturesque rocky gorge, in the depths of which was a small stream—a mere trickle during the hot weather. Its source lay in the midst of an extensive acacia wood, which tailed off on one side into the bare, open "boga," while on the other it became merged in a dense thicket of euphorbia trees, creepers,

[1] Cf. *With Flashlight and Rifle*.

and elelescho bushes, impenetrable to men but affording a refuge to animals, even to elephants. On the day before I had noted the fact that Masai warriors had recently encamped in the neighbourhood, with cattle which they had got hold of on a marauding expedition (and some of which they had here slaughtered), and that with their booty they had betaken themselves over the English frontier. It was quite on the cards that roaming young Masai warriors would suddenly turn up while I was there. It was several days' journey to the nearest inhabited region. For weeks together one would see no human soul save for a nomadic hunter every now and again.

The great barren wilderness, which then in the dry season could boast of no verdure save the evergreen Hunger-plant, so well suited to the arid velt; the romantic site of my camp; the beautiful moonlight night, darkened over from time to time by great masses of clouds, heralding the approach of rain; the dangers lurking all around: everything conspired to produce a wonderful effect upon the mind. The night had come upon us silently, mysteriously, jet-black. Before the moon rose, one's fancy foreshadowed some sudden incursion into the death-like darkness, the bodeful silence. There was something weird and unnatural about the stillness—it suggested the calm before the storm. Faint rustlings and cracklings and voices inaudible by day now made themselves heard. The world of the little living things came by its own, and crackled and rustled among plants and branches and reeds and grass. Hark! Is that the sound of a cockchafer or a mouse, or is it the footstep of a foe? . . .

C. G Schillings, phot.

VULTURES ON THE WING.

C. G. Schillings, phot.

VULTURES HOVERING OVER THE CARCASE OF A GNU WHICH HAD BEEN KILLED BY A LION.

C. G. Schillings, phot.

VULTURES MOVING AWAY FROM A CARCASE, STARTLED AT MY APPROACH. (WHEN FIGHTING OVER A CARCASE, THEY GIVE OUT A HISSING KIND OF SOUND.)

C. G. Schillings, phot.

MY PELICANS (*TANTALUS IBIS*, L.), WHICH AFTERWARDS TOOK UP THEIR ABODE IN THE BERLIN ZOOLOGICAL GARDENS.

Even within my tent there are evidences of life. Rats bestir themselves upon their daring enterprises, to meet their end, here and there, in my traps. Emin Pasha has told us how he experienced the same kind of thing. How dormice and beautiful Sterkulien made their home in his camp, gleefully climbing up and down the canvas of his

A SIESTA IN CAMP. THE MIDDAY HOUR.

tent during the night—doubtless gazing at the strange white man with their great, dark, wide-open eyes, as they did at me. . . . Save for these sounds there is complete stillness, broken only by the voice of the night-jar, mournful and monotonous, as it wings its eerie, noiseless flight in and out of the firelight and round and round the camp.

Beyond the glow of the camp-fire our eyes cannot travel—we cannot see what is happening outside the camp, even quite close at hand. This intensifies one's feeling of insecurity, for I know well how suddenly and with what lightning speed the great felines manage their attacks. It is in just such circumstances that so many men fall victims to lion and leopard. One evening a leopard will snatch a small dog from your feet, the next it will carry off one of the native women before the eyes of the whole population of your camp. You must have had such things happen to you, or hear of them from eye-witnesses, to realise the danger.

Near my tent stand two hoary old trees all hung with creepers. In the uncertain firelight they seem to be a-quiver with life, and they throw phantom-like shadows. I hear the soft footsteps of the watch—they recall me to actualities. Now the moon emerges, and suddenly sheds its brilliant radiance over the entire velt. It is like the withdrawing of a pall. My thoughts wander away upon the moonbeams, and travel on and on, over land and sea, like homing birds. . . . The reader who would steep himself in the beauty and strangeness of this African camp-life should turn to the pages of that splendid work *Caput Nili*, by my friend Richard Kandt. There he will find it all described by a master-hand in a series of exquisite nature-pictures. In language full of poetic beauty he gives us the very soul of the wilderness. These studies and sketches, from the pen of the man who discovered the sources of the Nile, are a veritable work of art. It is easier for the nature-lover to give himself up to the

C. G. Schillings, phot.

A STRANGE FRIENDSHIP SPRANG UP BETWEEN A SMALL APE AND A GOSHAWK THAT I HAD AT HOME AT AN EARLIER DATE. THE APE USED OFTEN TO PULL THE BIRD ABOUT PLAYFULLY, WHILE TWO STORKS LOOKED ON WITH INTEREST.

C. G. Schillings, phot.

"FATIMA" PROWLING ROUND. SHE WAS ON PARTICULARLY GOOD TERMS WITH THE MARABOU.

C. G. Schillings, phot.

CARRYING A FINE LEOPARD, WEIGHING 145 POUNDS, INTO CAMP. IT HAD BEEN TRAPPED.

THE BEARERS ALWAYS LIKE TO "KILL" THE GAME IN ACCORDANCE WITH MOHAMMEDAN RITES, EVEN WHEN DEATH HAS ALREADY BEEN ENSURED BY THE HUNTERS AND HAS BEGUN TO SET IN. WHEN THESE RITES CANNOT BE FULFILLED, THEY WILL SOMETIMES REFUSE TO EAT THE FLESH.

WHILE THE GAME IS BEING CUT UP, THE NATIVES OFTEN HAVE RECOURSE TO INNOCENT HORSEPLAY BY WAY OF VENTING THEIR HIGH SPIRITS.

charms of this African solitude than to set them forth adequately in words.

Wonderful, indeed, is the beauty of those African moonlight nights. Their radiant splendour is a thing never to be forgotten. How faint and faded in comparison seem our moonlight nights at home!

A TRAPPED LEOPARD.

Through the camp, past the smouldering and flickering fires, the Askari sentry wanders noiselessly. He is a man well on in years a tried man who has often been with me before. Years ago he vowed he would never again return to the wilderness with a "Safari," yet every time I revisit Africa the spell of the wild has come over him anew, and he has been unable to resist.

He comes to me now and says, as he has had so often to say before: "Master, do you hear the lions yonder in the distance?" And he makes his way towards the great fire in the centre of the camp and throws some fresh logs upon it. Flames spring up, blazing and flickering in the moonlight.

THE BABOON AND THE LITTLE BLACK LADY.

A FOWL OF THE VELT (*PTEROCLES GUTTURALIS SATURATIOR*, Hart).

XV

Night Photography under Difficulties

THERE is a notion prevalent, due to superficial observers, that there are certain drinking-places to which the wild animals are bound to come to quench their thirst, in all circumstances, during the hot season. Were this so the animals would have ceased ere now to exist. The poisoned arrow of the native, or the rifle of the white man, would long since have exterminated them. It is the case, however, that you can count upon finding game at specific drinking-places in the hot weather under certain circumstances, though much depends upon the direction of the wind and other things. The appearance of the larger beasts of prey by the waterside is enough, for instance, to make the others keep their distance for a considerable time.

When I have encamped in such localities it has generally been with a view to securing specimens of rare birds,

and apart from this I have confined myself to mak[illegible] observations of the life of the animals. Very large bull-elephants were the only kind of big game that I had any mind to shoot, for I was never at a loss for other kinds. Elephants roam about in the hot season from one watering-place to another, sometimes covering great distances. They know the danger they run in frequenting any one particular watering-place too regularly. This is true of herds of other animals as well.

These watering-places are, of course, very productive to the natives, who make no account of time and who spread themselves out over a number of them during the hot weather, thus multiplying their chances. But the havoc worked among the wild animals by their poisoned arrows or the other methods of hunting which they practise, when they have not taken to powder and shot, is not serious. They have been hunting in this way since prehistoric ages, and yet have been able to hand over the animal kingdom to us Europeans in all the fulness and abundance that have aroused our wonder and admiration wherever we have set foot for the first time.

In the course of my last journey I encamped for the second time at the foot of the Donje-Erok mountain (the circuit of which is a two-days' march), to the north-west of Kilimanjaro. The region had been well known to me since 1899. Previously to then it had been traversed only by Count Teleki's expedition. His comrade, the well-known geographer Ritter von Höhnel, had marked its outlines on the map. No one, however, had penetrated into the interior, and here a wonderful field offered

C. G. Schillings, phot.

MOONLIGHT ON THE VELT.

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itself to the sportsman and explorer. A number of small streams take their rise on the Donje-Erok. In the dry weather these are speedily absorbed by the sun-dried soil of the velt, but in the wet season they have quite a long course, and combine to form a series of small swamps. When these have gradually begun to dry and have come to be mere stretches of blackish mud, they reveal the

A RIVER-HORSE RESORT.

tracks of the herds of animals that have waded through them, elephants and rhinoceroses especially—mighty autographs imprinted like Runic letters upon wax.

In the dry season great numbers of animals made always for a source—very speedily dried up—to the south of the mountain. It was in this vicinity that I proposed to secure my pictures of wild life.

My caravan was very much on the *qui vive* when at last, after a long march, we were able to strike camp. We had been attacked by a band of Masai warriors during the night and had driven them off. It was only natural, therefore, that we should exercise some caution. But our fatigue overcame all anxiety as to another attack. We had made a long forced march, and were worn out with our exertions and our sufferings from thirst and the heat. Some of the bearers, succumbing under the weight of their burdens, had remained behind. We had started on the previous morning, each of us provided as well as was practicable with water, and had marched until dark, passing the night waterless and pressing on at daybreak. It was absolutely essential now to get to a watering-place, so we put out all our efforts, just succeeding in reaching our goal after nightfall. This march was the more exhausting in that we had had only two hours' sleep before the fray with the Masai. The bearers we had been obliged to leave behind were afterwards brought into camp safely by a relief party.

On exploring our vicinity next morning we found that our camp, which was to some degree safeguarded by a thorn-fence—a so-called "boma"—adjoined several earlier camps of native elephant-hunters, protected by strong palisades : a thing that had often happened to us before. These camps are to be recognised by the empty powder-casks left about or by the erection somewhere near of a fetich or charm to ward off evil, or something of the kind. It is only the natives who use firearms that have resort to such practices. So far as I know neither the

Wakamba nor the Wandorobo are addicted to them. In this particular case the charm took the shape of an arrangement of large snail-shells in the midst of a small enclosure four feet square. That it proved efficacious was suggested by the spectacle of the skulls and remains of some twenty recently killed rhinoceroses within a few

ONE OF THE PEAKS OF DONJE-EROK, IN THE VICINITY OF KILIMANJARO.

paces of the camp. . . . I had met with just the same state of things in 1900. These "sanctioned" elephant-hunters —or, to use the recognised term, these "trustworthy Fundi"—are an absolute pest. The arch exterminator of the elephants in the Kilimanjaro region was Schundi, the former slave of a Kavirondo chief. Schundi, in his capacity as a political agent and licensed elephant-hunter,

scoured the entire country with his men from 1893 to 1900.[1]

In the heart of the thicket we came suddenly upon a quite recent camp of native hunters of some kind—not Wandorobo, we judged, from utensils which they left behind, of a sort the Wandorobo never use. I was aware that other tribes had taken to hunting the animals in this region, the Masai themselves setting about it quite in the Wandorobo fashion. Our chief "find" in the camp, however, was a collection of some forty zebra-hides, quite freshly secured, and about the same number of hides of gnus as well as others of smaller game. Most of these skins were stretched out on the ground to dry, fixed with pegs. Probably the fugitives had taken a number of others away with them. I came to the conclusion that the natives were of the class that hunt on behalf of Indian, Greek, and other traders—a class far too numerous nowadays. The traders pay them very little for their labours, and themselves make huge profits out of it all.

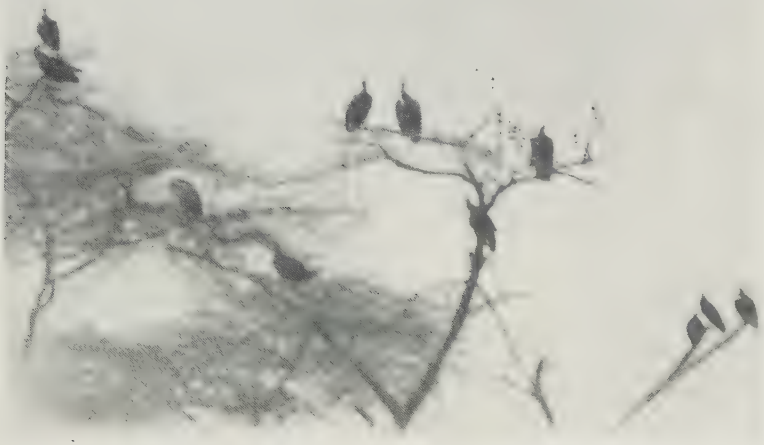
I took possession of the skins, prepared the best of them very thoroughly and carefully, and then sent them to Moschi, for despatch to the Berlin Museum. This task occupied me for two days, but I undertook it with gusto, for I knew that by reason of the variety of species of zebras and gnus frequenting this region, this big collection of skins was of great scientific value. And I rejoiced the

[1] Recent reports from West Africa confirm what I say about the disastrous results of allowing the natives to hunt with firearms. The same regrettable state of things prevails in every part of the world in which this is permitted.

C. G. Schillings, phot.

WHEN STARTING ON A LONG "TELEKESA-MARCH"—A MARCH OF MORE THAN TWENTY-FOUR HOURS BEFORE REACHING THE NEXT WATERING-PLACE—MY MEN PROVIDED THEMSELVES WITH AS MUCH WATER AS THEY COULD CARRY.

more over my treasure-trove in that it exempted me from shooting any more zebras or gnus myself. But my calculations were all to be upset. On my notification to the station that I had not bagged the animals myself, but had found them lying about in a bush-camp where they had been abandoned by nomadic native hunters, it was decided that they could not be recognised as my property



VULTURES.

without further proceedings. Eventually the matter was decided in my favour by a governmental decree, but in the meantime the skins were considerably damaged by insects and otherwise. Could I have foreseen this, I should not have been at the trouble and serious expense of saving them, but should have left them as a welcome feast to the hyenas and jackals. What I was still able to save out of the lot I sent later to the Berlin Museum.

Near some of the drinking-places along the river I found the cleverly contrived reed-shelters behind which the natives take refuge. The immense numbers of vultures and jackals and hyenas showed that these gluttonous creatures had found an abundance of provender, especially near the deserted camp. The vultures, which were of various species, came down from their perches on the trees and settled on the ground quite near us. It was brooding-time for some of the larger species, and presently I found a great number of their nests with young birds in them. It was very interesting to watch the old birds and their young together.

It took me about a week to decide on the spots best suited for my flashlight photographs. After a good deal of really hard work, and after any number of unsuccessful efforts, I was at last satisfied that my three cameras were so placed as to promise good results if I had any luck. But the fates seemed against me. There were hundreds of different drinking-places along the course of the stream, and with so great a choice at their disposal the animals appeared to give my camera a wide berth.

Some days later we had an unpleasant surprise. One of my Askaris had gone at daybreak, as was his custom, to examine one of my jackal traps. Suddenly we heard the sound of shots in the direction of the trap, about twenty minutes' walk from the camp. As in view of my strict orders against shooting at game there could be no question of this, we at once assumed that we had to reckon with an attack by natives. In a trice I had all my arrangements made. Dividing my armed followers

C. G. Schillings, phot

FLASHLIGHT PHOTOGRAPHS.

C. G. Schillings, phot.

FLASHLIGHT PHOTOGRAPHS OF HYENAS (*HYÆNA SCHILLINGSI*, Mtsch.) AND JACKALS.

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into two sections, I set out instantly with one of them in the direction of the Askari, leaving the other with Orgeich to defend the camp.

What had happened? It was the old story, so familiar to all experienced travellers, and showing how easily one may be drawn into a fight, yet how easily trouble may be avoided if one takes the right line. My Askari, normally a very steady and reliable man who had been in the service of the Government, had been startled by the sudden apparition right in front of him of a great band of Masai warriors armed with spears. They had raised their spears, no doubt instinctively, at the sight of the rifle-bearing soldier. He, for his part, and his two unarmed comrades, jumped simultaneously to the conclusion that these were the same Masai who had previously attacked us. He decided at once to fire. In an instant the Masai vanished in every direction.

It was not a laughing matter. There had been recent fights in the neighbourhood of my camp between Masai warriors and the inhabitants of the Uferi district—the remains of men who had been killed in these frays bore witness to the truth of what my guides had told me about them. And it was not long since certain European cattle-dealers, at a spot some two days' journey farther on, had been murdered by the Masai. These facts, taken in connection with the night-attack, made us realise the need of caution.

On reaching the scene of the incident, I ascertained that a great band of Masai, accompanied by their wives, had been seen on the previous evening in the neighbour-

hood of the stream, and that they had encamped for the night in a mouldering old kraal in the thorn-thicket, and it was while slumbering peacefully in this that they were disturbed by my Askari. Scattered all over the place were goods and chattels of various descriptions which they had left behind them in their hasty flight, and which I now had carefully collected together. From their nature I concluded that the Masai were making for some place at a considerable distance, and that there was, therefore, no danger of unpleasant consequences. I returned to my camp to reassure my people, and at once got some of my Masai friends, who had been with me for a long time, to go after the fugitives and bring them back. That was the only way to effect an understanding—any other messengers would have failed in the mission.

Towards midday my Masai returned to camp with some thirty of the spear-armed warriors and a number of their women-folk. I gave them back their belongings, together with a present by way of *amende* for their fright. This they accepted with equanimity after the manner of all natives. Then they took their departure, the incident being thus happily terminated without bloodshed.

Curiously enough, Orgeich had had a somewhat similar encounter with Masai a short time before. He had been for a turn in the neighbourhood of the camp, and was coming back in the dark along a rhinoceros-track. When he had got to within a quarter of an hour's walk of the camp, there was a sudden clatter right in front of him, and in the uncertain moonlight he descried a band of armed Masai. Remembering the recent night-encounter

he instantly raised his rifle to fire. But the veteran soldier had self-control enough to resist the impulse, and in this

MY NIGHT-APPARATUS IN POSITION, READY TO WORK.

case also there were no ill consequences. But, as he still continues to declare, it was a near thing.

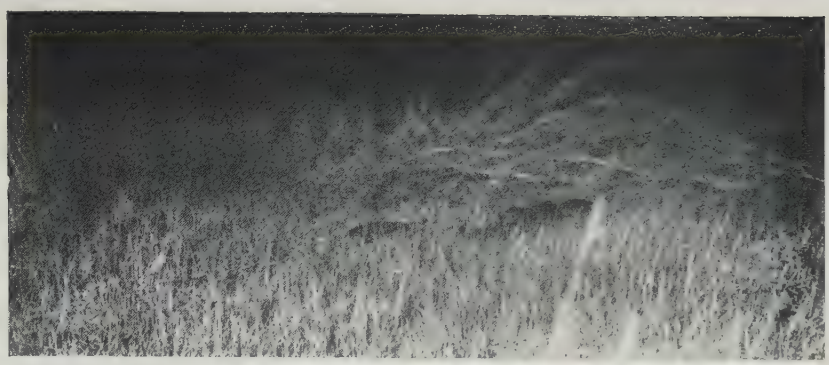
Such incidents, it will be recognised, can very easily lead to serious results.

Later I was to have an unpleasant experience in regard to natives. A band of nomadic hunters, perhaps those who had encamped where I found the zebra-skins, had "gone for" two of my cameras. They had taken away all those parts of them that could be of any use to them, and left them of course quite useless to me. It is noteworthy that they did not smash them to pieces, as Europeans might have done. They had merely detached the metal portions and others which they could turn to some account. This loss was, however, very annoying to me, and I found it necessary to establish two relays of men on guard to look after the sole remaining apparatus throughout the day.

A PET OF THE CARAVAN.

C. G. Schillings, phot.

A BAOBAB (*ADANSONIA DIGITATA*). THESE TREES ARE OFTEN BELIEVED BY THE NATIVES TO BE INHABITED BY GHOSTS. THEY USED TO COME INTO THE STORIES TOLD BY MY FOLLOWERS.



THE FIRST FLASHLIGHT PHOTOGRAPH WITH WHICH I HAD ANY MEASURE OF SUCCESS! A MONGOOSE MAY BE JUST GUESSED AT UNDER THE THORN-BRANCH.

XVI

Photography by Day and by Night

THERE is an old German recipe for the catching of a lion: you put the Sahara through a sieve—and behold the King of Beasts!

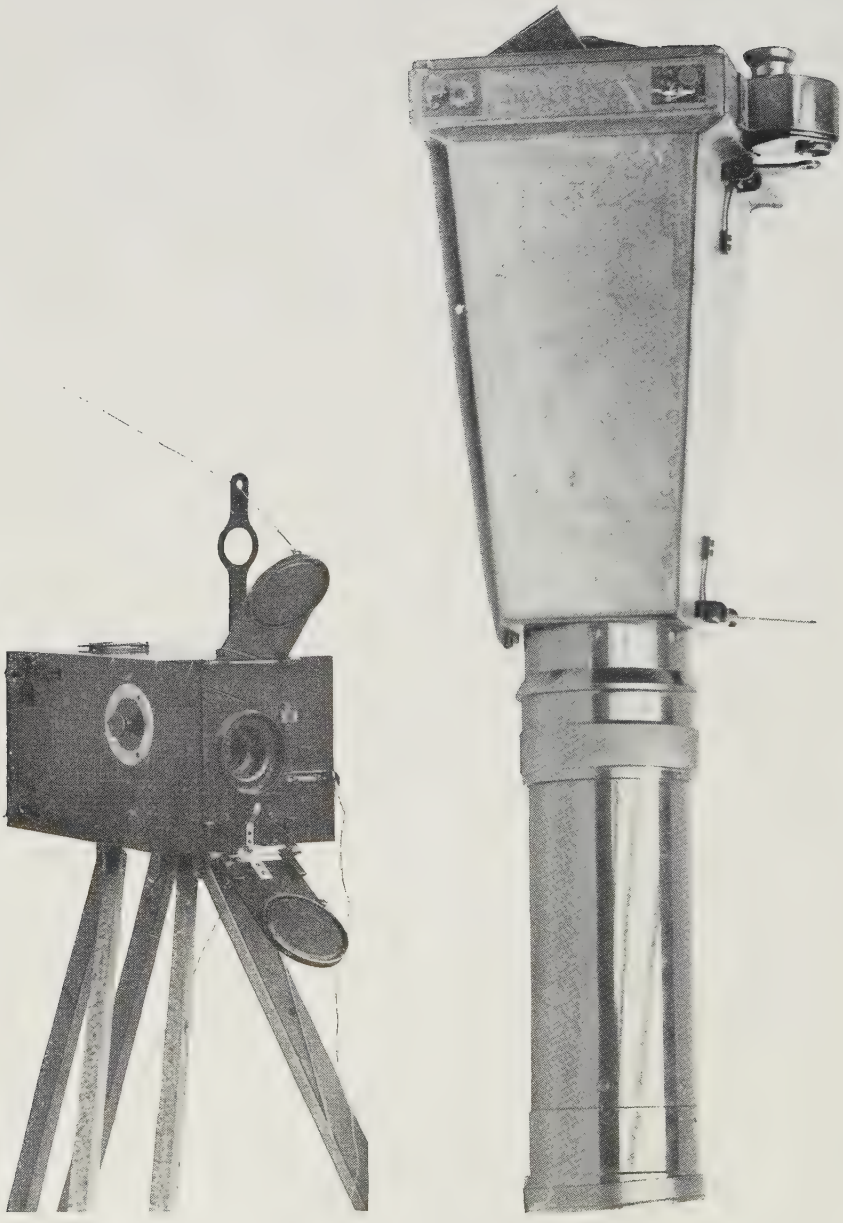
The photographing of lions is not to be managed so easily. I am always being asked how I took my photographs. I shall try to give an answer in the following pages.

Before *With Flashlight and Rifle* was published, the only successful photographs taken by night that were known to me were some few excellent pictures of certain species of American deer, secured by an enthusiastic sportsman (a legal official in the service of the Government of the United States) after years of untiring effort. After any number of fruitless attempts, this gentleman contrived to photograph these animals grazing by night near the banks of a river down which he drifted in a

boat. He set up a row of cameras in the bow of his craft, and when it passed close to the deer standing in the water, he let his flashlight flame out, and in this way produced—in the course of ten years or so—a number of very interesting photographic studies, which made his name well known in his own country and which won him a gold medal at a Paris Exhibition, where his work aroused much attention. I was familiar also with the "telephoto" pictures which Lord Delamere brought home from East Africa.[1] Those of Mr. Edward North Buxton were published first in 1902, so far as I know. I myself, I should explain, do not profess to be a complete master of the photographer's art. Indeed, I rather rejoice in my ignorance of many of the inner secrets of the craft known only to experts, because I believe it has helped me to get a certain character into my pictures which would perhaps have eluded one whose mind was taken up with all the difficulties involved in the task.

At first sight the photographing of animals may seem a simple enough matter, but if we look at the photographs taken in zoological gardens or in menageries or game reservations, or photographs taken during the winter at spots to which the animals have had to come for food, or at the various touched-up photographs one sees, we shall find that there are very few of any real worth from the standpoint of the naturalist. Whoever would take photographs of value should take care that they be in

[1] I do not know of any "telephoto" picture of animals in rapid motion having been published anywhere previously to my own. Those I refer to here are of animals at rest or moving quite slowly.



THE APPARATUS WHICH I FIRST USED FOR MY NIGHT-PHOTOGRAPHS, WITH THE SHUTTER KEPT OPEN (*see* p. 687).

THE GOERZ-SCHILLINGS NIGHT-APPARATUS.

no way altered or touched up. Touched-up photographs are never to be trusted.

The story of my progress in the art of animal photography is soon told.

In 1896 and 1897 I was not adequately equipped, and I took only a few photographs, all by daylight.

After going through a careful course of instruction in Kiesling's Photographic Institution, I did not succeed in entirely satisfying myself with the daylight photographs I took on my second expedition of 1899—1900. It was impossible at that time to photograph objects at great distances, the telephoto lens not yet carrying far enough. My efforts to photograph the animals by night proved entirely fruitless, for one reason because the flashlight apparatus would not work. It was exasperating to find that my heavy and expensive "accumulators"—procured after consultation with technical experts—refused to act, and I remember vividly how I flung them out into the middle of a river! I achieved but one single success at this period with a self-acting apparatus, namely the photograph of two vultures contending over carrion, here reproduced; one of them has been feeding, and the other is just about to assert its right to part of the meal. The attitudes of the two birds are very interesting, and one feels that it would have been very difficult for a painter to have put them on record. But all my other attempts failed, as I have said, from technical causes, and I had to content myself for the most part with photographing the animals I hunted, though I did succeed in getting pictures of a waterbuck and a giraffe at which I had not

shot. My photographs won so much approval from experts on my return home that I was encouraged to go further in this direction.

But what difficulties I had to overcome! So far back as the year 1863 a German explorer, Professor Fritsch, now a member of the Privy Council, had set about the task of photographing wild animals in South Africa. Those were the days of wet collodion plates, and it is really wonderful how Professor Fritsch managed to cope with all the difficulties he had to face so far from all possibility of assistance. He succeeded in the course of his expedition in photographing an African wild animal upon a dry plate for the first time on record. By his kindness I am enabled to reproduce this historical picture here—it is a thing of real value It is the photograph of an eland, at that time an animal often met with in Cape Colony, where game of all kinds has now been almost completely exterminated. Professor Fritsch's account of his experiences should be heard for one to form any notion of the wealth of animal life that then adorned the South African velt. His photographs are especially interesting as the first of their kind. It was not until nearly forty years later that the English sportsmen already mentioned and I myself embarked systematically upon similar enterprises.

On my third expedition in 1902 I tried to photograph with two telephoto cameras which had been placed at my disposal by the Goerz Optical Institute. Without attempting to explain the complicated mechanism of these apparatus—the idea of which came first to English

C. G. Schillings, phot.

AUTOMATICALLY TAKEN PHOTOGRAPH OF TWO VULTURES ENGAGING IN A CONTEST OVER CARRION.

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travellers—I may say that they are beset with difficulties. They require a long exposure, and are best suited, therefore, for stationary objects. If you wish to photograph animals in motion, you must learn to expose your negative

THE FIRST DRY-PLATE PHOTOGRAPH, PROBABLY, EVER TAKEN IN THE AFRICAN DESERT. THE WORK OF ONE OF THE OLDEST OF AFRICAN EXPLORERS, PROFESSOR FRITSCH, IT REPRESENTS AN ELAND WHICH HE HAD KILLED —A SPECIES THEN FREQUENTLY MET WITH IN CAPE COLONY.

long enough to secure a clear impression, yet not so long as to make the moving animals come out quite blurred. I am strongly of opinion that it is not of much advantage to make out a table of calculations as to the time of

exposure. Experience alone can enable you to judge what exposure to allow. When you have got your shutter to the correct speed and chosen the correct diaphragm for your lens, you must get into the way of using the camera as quickly and deftly as your rifle.

In this way, just as in shooting, you will learn to allow for the movements of the object you are aiming at—you will let your camera move accordingly. This needs a lot of practice. At the period when I was using the Goerz apparatus, a large number of similar cameras of all sizes were returned to the manufactory by practical photographers as unuseable. This shows how difficult it is to form any opinion as to the possibilities of the telephoto lens without going in for thorough and repeated experiments.

It is only on rare occasions that you are able to use a stand-camera for photographing objects at a distance. In most cases you must shoulder your photographic gun, and it may be easily imagined what dexterity is required for its proper management. In following up the moving object with your lens you inevitably make the background something of a blur. You are apt at the same time to underexpose. The change of diaphragm and the modification of the speed of the shutter involve many failures. The telephoto lens has this advantage, however, that you can generally get good results with it at a hundred paces. In the case of birds on the wing, either rising or flying past you, you have to get into the way of reckoning the distance—a difficult matter. Of course you must always have the sun more or less behind you. The conditions of the atmosphere in the tropics—the shimmering waves of

C. G. Schillings, phot.

THIS PHOTOGRAPH BEARS WITNESS TO THE DESIRABILITY OF HAVING PERFECTED FILMS TO WORK WITH, FOR GLASS PLATES ARE APT TO BREAK AND GOOD PICTURES TO BE QUITE SPOILT IN CONSEQUENCE.

light that rise up out of the scorched soil, for instance—make it peculiarly hard to calculate the time of exposure, and many photographs turn out failures which you have felt quite sure of having taken properly. This is specially disappointing in the case of animals that you may never have another opportunity of photographing. In such cases I make a practice of giving as many exposures as possible, in the hope of one or other of them turning out right.

You often miss splendid chances, of course, simply through not having your camera at hand. A few moments' delay may lose you an opportunity that will never come to you again. Then, again, you are just as apt in Africa as elsewhere to make the mistakes so well known to all photographers—wrong focussing, using the same plate twice, not getting your objects properly on the plate, etc. Nor can you always avoid having a tree or bush or branch between you and the animal you want to photograph. These things are often enough to quite spoil your picture. The weight of the camera, too, is in itself a hindrance. It is not every one who can handle a 13 × 18-cm. telephoto camera. Even a 9 × 12-cm. is heavy enough. It must be remembered that on one's journeyings through the wilderness it is almost as much as one can do to carry with one a sufficient supply of water—that most essential thing of all. And one has to be most careful of the apparatus, for mischances may occur at any moment.

Though my experiences and those of others will have had the effect of smoothing the way for all who go photographing in future in Equatorial Africa, still, hunting with the camera will remain a much more difficult thing than

hunting with the rifle. The practised shot needs only a fraction of a second to bring down his game—often he scarcely even sees it, and fires at it through dense shrubs or bushes, whereas the photographer can achieve nothing until he has contrived to secure a combination of favourable conditions, and he wants in many cases to "bring down" not just one animal, but a whole herd. His most tempting chances come to him very often when he is unprepared. That is why I insist upon the desirability of his shouldering a camera like a gun. At short range you can secure wonderful pictures even with an ordinary small hand-camera, but for this kind of work you must of course have good nerves. . . . It was in this way I took the photographs of the rhinoceroses in the pool reproduced in *With Flashlight and Rifle*, some of the best I ever secured. One of these, taken at a distance of fifteen or twenty paces, shows the "rhino," not yet hit, rushing down upon Orgeich and me. In another instant I had thrown my little hand-camera to the ground, and just managed to get a bullet into him in the nick of time. He swerved to one side and made off into the thicket, where I eventually secured him. He is now to be seen in the Munich Museum.

A fruitful source of disillusionment lies in the fact that the plates are sensitive to the light to a degree so different from our eyes. As the blue and violet rays chiefly act upon them, they cannot render the real effects of colouring. It is greatly to be desired that we should manage to perfect orthochromatic plates, sensitive to green, yellow and red rays of light. I myself have been unable to secure

C. G. Schillings, phot.

A PLATE WHICH I EXPOSED TWICE BY MISTAKE—SUCH MISTAKES WILL HAPPEN SOMETIMES, HOWEVER CAREFUL ONE MAY BE. IN ADDITION TO THE GNUS AND ZEBRAS WHICH STAND OUT CLEARLY IN THE PICTURE, FAINT OUTLINES OF HARTEBEESTS (ON A SMALLER SCALE) MAY BE DESCRIED.

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good results with orthochromatic plates with the telephoto lens, as I have found them always too little sensitive to white light for instantaneous work. Latterly there has been produced a new kind of panchromatic plate which only needs an exposure of one-fiftieth part of a second, and I would strongly recommend its use for the photographing of animals for this reason.

In the animal pictures of the Munich painter Zügel, we see admirably rendered all the many shades of colouring we note, under different conditions, close at hand or far away, when we have the actual wild life before our eyes. There we note that the upper part of the animal's body often reflects so strongly the cold blue of the sky that its own colouring is, as it were, cancelled, or at least very greatly modified. We note, too, that an animal in reality reddish-brown in colour becomes violet owing to the blue in the atmosphere. Refinements of form and hue are lost in the glare of the sun, and only the stronger outlines and more pronounced colours assert themselves. Sometimes the sun's rays, reflected from the animals' skins, produce the effect of glowing patches of light, sometimes they are absorbed ; sometimes the animals look quite black, sometimes absolutely white. Photographs of animals taken under such conditions do not, of course, give a good idea of the normal colouring of the animals. The success of a photograph depends, therefore, very largely upon the nature of the light.

For an effective picture you need to have a group of animals either standing still or in motion, and this you can very seldom get at close quarters, though now and

again you may happen upon them standing under trees; and when this occurs you may hope for good results, because the way in which the blue rays of light are reflected from the trees has a favourable effect upon the bromide-silver plates.

While it is true that there can be nothing more disappointing than the discovery, when developing one's photographs of animals in a country like Africa, that negatives of which one had great hopes are no good, this very possibility adds to the fascination of the work, and is, as it were, a link between the sport and that of our fathers and grandfathers. The kind of rifle-shooting we go in for nowadays has nothing in common with that of the hunter who was dependent upon a single bullet the effect of which he could only get to make sure of after long experience. To the true sportsman the camera is the best substitute for the old-fashioned gun, inasmuch as it involves very much the same degree of difficulty and danger.

How keenly I regret that I had not the advantage from the first of the perfected photographic apparatus that has come into existence as the result of long experience! I look back with regret upon the many failures I experienced in my earlier efforts, the excitement of the moment often causing me to neglect some necessary precaution. Lions, rhinoceroses, hippopotami, giraffes, and antelopes innumerable—nearly all my attempts to photograph them were fruitless. When I came to develop the negatives at night-time I would find a blurred suggestion of the objects I had seen so

C. G. Schillings, phot.

A TELEPHOTOGRAPH OF OSTRICHES, SCARCELY DISCERNIBLE TO THE LEFT OF THE PICTURE.

distinctly before me in the daylight, or else, owing to some mishap, an absolute blank. All the greater was my joy when on rare occasions I did succeed in getting such pictures as those of the rhinoceroses already referred to.

I made it a practice to develop at night in my tent, as soon as I possibly could, all negatives that I thought at all likely to be successful. The only negatives I sent to Europe were duplicates of those which I had already developed myself. At home, of course, the developing can be done much more carefully. No one who has not had the experience can realise what it means to have to develop plates in the heat and damp of Equatorial Africa and with the kind of water at one's disposal there. When I found that my negatives were successful, not content with developing them, I always made a number of bromide-silver copies of them. These were put away in separate cases and the original was despatched home as soon as possible. If this original negative got lost *en route*, I was almost sure of having one of the copies, even if some of the packing-cases got lost also.

The photographer can always console himself with the reflection, in the midst of all his hardships and mishaps, that the pictures he does succeed in taking count for more than so many head of game.

It is very interesting to note that my photographs of birds on the wing have put so many people, especially painters, in mind of the work of Japanese artists. Doflein, in his book *Ostasienfahrt*, speaks as follows of the peculiar faculty the Japanese have in this field of art. "The

Japanese animal painters," he says, "show a more highly developed power of observing nature than that of their Western fellow-workers. They render the swift, sudden motion of animals with astonishing dexterity. . . . They had learned to see and reproduce them correctly before the coming of instantaneous photography. . . . The Japanese seem to have a very highly developed nervous organism. Their art is evidence of this, no less than their methods of warfare—their effective use of their guns at sea, for instance."

I would add to this my own opinion that an inferior shot would have no success whatever with a telephoto lens. You must have learnt to stalk your quarry warily—this is as important as a steady hand. A practised shot who knows how to get within range of the animals is peculiarly well fitted for the work. The least twitch at the moment of taking the photograph ruins everything, for even in the case of moving objects the exposure is not what can be accurately called instantaneous, owing to the peculiarity of the lens.

I have already expressed my view that this non-instantaneous exposure (when not too prolonged) imparts a certain softness and vagueness to the photograph which give it an artistic effect. It gives scope also for the personal taste and preferences of the operator. When taken against the horizon photographs require less exposure than with the velt for background. The dark green of the trees and shrubs no less than the red laterite soil offering unfavourable backgrounds for photographs of animals in Africa, as elsewhere, one has to pay particular attention,

C. G. Schillings, phot.

PHOTOGRAPHS OF BIRDS TAKEN WITH THE TELEPHOTO-LENS AT DISTANCES VARYING FROM 20 TO 200 PACES. 1. SPURRED GOOSE (*PLECTROPTERUS GAMBENSIS*, L.). 2. DARTER OR "SNAKE-NECK" (*ANHINGA RUFA LACEP*, Daud.). 3. GREATER CORMORANT (*PHALACROCORAX LUCIDUS LUGUBRIS*, Rüpp.). 4. YELLOW-FLUTED FRANCOLIN (*PTERNISTES LEUCOSEPUS INFUSCATUS*, Cab.). 5. A BIRD OF PREY (*MELIERAX POLIOPTERUS*, Cab.) (?) 6. BEE-EATER (*MELLITOPHAGUS MERIDIONALIS*, Sharpe). 7. SHRIKE (*LANIUS CAUDATUS*, Cab.). 8. PELICAN (*PELICANUS RUFESCENS*, Gm.).

TELEPHOTOGRAPHS OF BIRDS ON THE WING. FIRST ROW: THE STORK-VULTURE (*SERPENTARIUS SERPENTARIUS* [MILLER]). SECOND ROW: HAMMERHEAD (*SCOPUS UMBRETTA*, Gm.), SMALL BUSTARD (*OTIS GINDIANA* [OUST]) SADDLE STORK (*EPHIPPIORHYNCHUS SENEGALENSIS* [SHAW]). THIRD ROW: BATELEUR EAGLE (*HELOTARSUS ECAUDATUS* [DAUD.]), VULTURE (*PSEUDOGYPS AFRICANUS SCHILLINGSI*, Erl.), MARABOU (*LEPTOPTILOS CRUMENIFER*, [CUV.], Less.).

of course, to the effects of shadows, shadows which to the eye seem quite natural producing extraordinary effects upon the negatives.

Some of the photographer's difficulties are avoided

when he uses a heavy lens with a long focus. These can be easily used in a strong light. On the other hand they have many drawbacks—they are too apt, especially, to give a blurred effect to the background in the case of objects photographed near at hand. This entails the loss of one of the essential elements

TELEPHOTOGRAPH OF A DWARF GAZELLE (*GAZELLA THOMSONI*, Gther.) IN FULL FLIGHT, TAKEN AT A DISTANCE OF 60 PACES. WHEN ANIMALS IN RAPID MOTION ARE THUS PHOTOGRAPHED, THE BACKGROUND ALMOST INEVITABLY COMES OUT BLURRED.

of such pictures, namely the representation of the animal in its natural surroundings. However, I would like to call the attention of all travellers to the fact that such apparatus are available. Their weight and size entail the putting forth of great strength and energy, both in the carrying of them and the handling of them, but to

C. G. Schillings, phot.

JACKAL TAKING TO FLIGHT, STARTLED BY THE FLASHLIGHT.

my mind no trouble and no exertion could be excessive in the work of securing records of what is left us of animal life, in the spirit in which Professor Fritsch achieved his task in South Africa.

The impossibility of securing sharp, clearly defined impressions of the animals with the telephoto lens at a hundred paces or more, and the few chances I had of photographing them close at hand by daylight, were responsible partly for my determination to go in for flashlight pictures by night. At first my idea was discouraged and opposed by expert advisers, but the Goerz-Schillings apparatus was evolved out of my experiments and makes it possible now to secure excellent representations of wild life.

As I have said already, I did not succeed with my flashlight photographs on my second expedition. And my third expedition, on which I managed to take a few, was brought to a sudden end by severe illness. At that time I had not found a way to combine the working of the flashlight with that of the shutter, essential to the photographing of objects in rapid motion. My cameras stood ready for use in the dark with the lens uncovered and the plates exposed, the shutter being closed automatically when the flashlight contrivance worked. To my surprise and disappointment this arrangement proved too slow; the exposure was too long in the case of animals moving quickly. Jackals emerged from my negatives with six heads, hyenas with long snake-like bodies. Unfortunately I destroyed all these monstrosities, and cannot therefore reproduce any of them here. Now and again,

however, I was fortunate enough to get a picture worth having—for instance, that of a hyena making off with the head of a zebra, and that of three jackals, included in the illustrations to *With Flashlight and Rifle*. The first photograph I succeeded with in 1902 was that of a mongoose coming up to the bait placed for him. On page 657 the reader may see this marten-like animal taking to flight among the thorn-bushes. I secured a number of other pictures, notably of hyenas, both spotted and striped, and of jackals, in all kinds of strange positions, moving hither and thither in search of prey.

What a state of excitement and suspense I used to be in at first when the flashlight flamed out—until I got to realise that owing to the rapid movements of the animals most of the photographs were sure to be failures.

My illness and return from this expedition proved really an advantage in the long run, inasmuch as they enabled me to get the apparatus brought to such perfection as to render possible the photographing of even the most rapid movements. This was brought about in the Goerz Institute, Herr M. Kiesling contriving to secure the simultaneous operation of the flashlight and the shutter.

Equipped with this new apparatus, I set out on my fourth expedition, betaking myself for two reasons to districts with which I was already familiar. In the first place, success was much more likely in a country the speech of whose inhabitants and all their habits and customs were known to me; but my chief reason was that I wished to achieve a pictorial record of the wild life of the German region of Africa. As a matter of

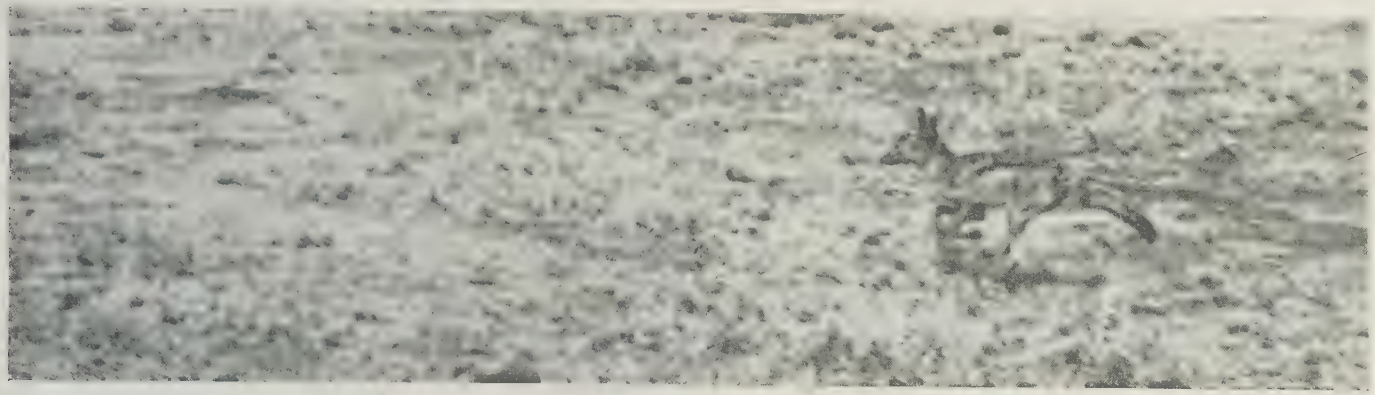
C. G. Schillings, phot.

LIONESS FRIGHTENED AWAY FROM CARCASE BY THE FLASH-LIGHT.

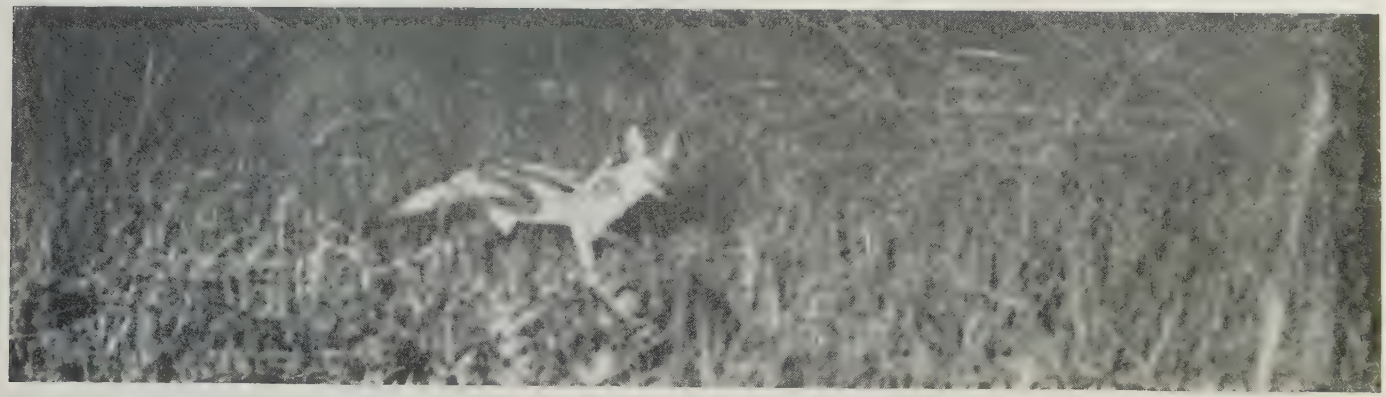
C. G. Schillings, phot.

AIMING AT A PIGEON AND HITTING A CROW! I FOUND THIS SPOTTED HYENA ON THE PLATE INSTEAD OF THE LION FOR WHICH IT WAS INTENDED.

[p. 66



PHOTOGRAPH OF A JACKAL, TAKEN WITH A SMALL HAND-CAMERA.



C. G. Schillings, phot.

PHOTOGRAPH OF A JACKAL TAKEN WITH MY FIRST, PRIMITIVE NIGHT-APPARATUS, NOT TOO SUCCESSFULLY!

IN ORDER TO ENSURE SUCCESS WITH MY FLASHLIGHT-PHOTOS, I USED TO MAKE CONTINUAL EXPERIMENTS BEFOREHAND. I USED TO MAKE SOME OF MY MEN ACT AS MOVING MODELS, AND GET THEM TO WAVE CLOTHS IN THEIR HANDS.

fact, with this kind of object in view, a man might spend a lifetime in any such region, and find that, however

narrow its boundaries, it could always offer him fresh subjects for study and observation.

On arrival the photographic outfit proved so cumbersome, both as regards transport and management, that both Prince Löwenstein, who accompanied me, and who was not easily to be daunted by obstacles, and also Orgeich gave expression to pessimistic views as to the possibility of fulfilling my purpose.

No one, indeed, had been able to boast of success until then with this new apparatus! I had yet to satisfy myself that it was really efficacious—that, for instance, it would enable me to photograph a lion falling upon its prey. Many were the fruitless experiments witnessed by the Pangani forest. We experimented night after night, now at one spot, now at another—my men learning to enact the rôle of lions and other animals for the purpose. The Oriental and the negro are alike in their bearing on such occasions, but these flashlight operations did really succeed in arousing the wonder of my followers. The laughter of my chief man still rings in my ears. "But the lions are far away, master!" he would declare, utterly unable to understand my proceedings. It took me long, and I had had a large number of failures, before I succeeded in overcoming his attitude of incredulity.

As I have already intimated, the efficacy of the telephoto lens in the tropics depends to an extraordinary degree on the conditions of the atmosphere. The efficacy of the flashlight apparatus depends upon the precise absolutely simultaneous working of the flashlight and the shutter. It took me weeks and months (and I very

C. G. Schillings, photo.

FLASHLIGHT FAILURES II. BLACK-HOOFED ANTELOPES COMING DOWN TO THE WATER-SIDE TO DRINK. THE BLEMISHES WERE CAUSED BY BITS OF THE MATERIAL WITH WHICH THE FLASHLIGHT POWDER WAS COVERED TO PROTECT IT FROM DAMP BEING BLOWN INTO THE AIR AND BURNING AS THEY FLEW IN FRONT OF THE LENS.

C. G. Schillings, phot.

HOW MY FLASHLIGHT PICTURES WERE APT TO BE SPOILT. I. THE ZEBRA IS BEHIND THE STICK TO WHICH THE COMMUNICATING STRING IS ATTACHED.

nearly gave the thing up as hopeless) before I managed to get good results in the wilderness, though theoretically, and to a certain extent in practice at home, the apparatus had been perfected. The heavy dew of the tropical night, or a sudden shower of rain, may easily "do for" the flashlight unless the apparatus has been thoroughly safe-guarded. And there are any number of other mishaps

FLASHLIGHT FAILURES III. TWO TURTLE-DOVES (ONE ON THE WING) SET MY NIGHT-APPARATUS WORKING. MISHAPS OF THIS KIND OFTEN OCCUR.

to be provided against. On one occasion hyenas carried off the linen sandbags that form part of the apparatus; mongooses made away with the aluminium lid of the lens-cap and hid it in their stronghold, an ant-hill; ants gnawed the apparatus itself. And when the photograph has at last been taken, a lot of other harmful contingencies have to be kept in mind. The fact that several shillings'

worth of powder is consumed in each explosion of the flashlight is in itself a serious consideration. Of course, there is always the additional danger of the cameras being stolen or destroyed by natives—a misfortune I experienced more than once.

I would give the intending photographer a special

FLASHLIGHT FAILURES IV. A BLACK-HOOFED ANTELOPE DOE SWERVES SUDDENLY ROUND DURING THE FLASH.

warning against careless handling of the explosive mixture. The various ingredients are separately packed, of course, and are thus quite safe until the time has come to mix them together (I know nothing of the ready-made mixtures which are declared to be portable without danger). This business of mixing them with a mortar is dangerous undoubtedly, for the introduction of a grain of sand is

C. G. Schillings, phot.

PHOTOGRAPHIC STUDIES OF ANTELOPES SHOT BY THE AUTHOR AND NOW TO BE SEEN PRESERVED IN GERMAN MUSEUMS. 1, 2. WATERBUCK (*COBUS. AFR. ELLIPSIPRYMNUS*, Ogilb.), MALE AND FEMALE. 3. ELAND (*OREAS LIVINGSTONI*, Sclat.), FEMALE. 4. MASAI HARTEBEEST (*BUBALIS COKEI*, Gthr.), YOUNG BUCK.

enough to cause an explosion. I myself, as well as others, have had some very narrow escapes whilst thus occupied, and, as every photographer knows, the work has had fatal results in several instances of recent years.

My apparatus revealed several shortcomings even in the improved form. It was not absolutely light-proof, and it had to be set up always, for its automatic operation, in the brief tropical dusk. If no animal presented itself for portraiture the plates exposed were always wasted, unless at dawn they were withdrawn again. (This is not the case with the apparatus as since perfected.)

Many wrong impressions are current in regard to this kind of photography. It can be managed in two ways. Either the photographer himself remains on the spot to attend in person both to the flashlight and the exposure, or else the mechanism is worked by a string against which the animal moves. Before I took my photographs I had been a spectator of all the various incidents represented in them, watching them all from hiding-places in dense thorn-bushes, thus coming, as it were, into personal touch with lions and other animals. Though not so dangerous really as camping out on the velt, where one's fatigue and the darkness leave one defenceless against the possible attacks of elephants or rhinoceroses, you need good nerves to spend the night in your thorn-thicket hiding-place with a view to flashlight snapshots of lions at close quarters. In that interesting work *Zu den Aulihans*, by Count Hoyos, and in Count Wickenburg's *Wanderungen in Ostafrika*, the reader will find interesting and authentic accounts of night-shoots

which correspond with my own experiences. Count Goudenhove in his first book describes very vividly the effect upon the nerves of the apparition of numbers of lions within a few paces of him, when concealed in a thorn-bush at night.

There is a wonderful fascination at all times in lying in wait by night for animals, and watching their goings and comings and all their habits. Even here at home, in our game preserves, the experience of passing hour after hour on the look-out has a charm about it difficult to describe in words. Out in the wilderness it is increased immeasurably. It is an intense pleasure to me to read other people's impressions of such experiences, when I feel the accounts are trustworthy. They are so different in some respects, so much alike in others. In my first book I cited Count Goudenhove, mentioned above, in this connection, as a man of proved courage, who writes at once sympathetically and convincingly. Here let me give a passage from the book of another sportsman, Count Hans Palffy. In his *Wild und Hund* he speaks as follows: "I had been waiting for two hours or so in the darkness without being able to descry the carcase of the rhinoceros" [which he himself had shot and which he was using as a bait for the lion], "when suddenly I heard a sound like that of a heavy body falling on the ground, and then almost immediately the lion began growling beside the dead animal. I could hear the King of Beasts quite distinctly, as he began to pull and bite at the flesh. . . . He would move away from it every ten or twenty minutes, always in the same direction, to

C. G. Schillings, phot. 1 2 3

JACKALS. ONLY ONE IS VISIBLE, BUT THE GLEAMING EYES OF TWO OTHERS (NOS. 2 AND 3) GIVE A PECULIAR INTEREST TO THIS PHOTOGRAPH.

C. G. Schillings, phot.

PHOTOGRAPHS OF EAST AFRICAN ANTELOPES SHOT BY THE AUTHOR AND NOW PRESERVED IN VARIOUS MUSEUMS. 1. SMALL KUDU (*STREPSICEROS IMBERBIS*, Blyth), BUCK. 2. DWARF GAZELLE (*GAZELLA THOMSONI*, Gthr.), BUCK. 3. WHITE-BEARDED GNU (*CONNOCHÆTES ALBOJUBATUS*, Thos.), BULL. 4. BUSH-BUCK (*TRAGELAPHUS MASAICUS*, Neum), BUCK. (THE FEMALE OF THE FIRST-NAMED AND LAST-NAMED SPECIES HAVE NO HORNS.)

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give out a series of roars. The effect of this was magnificent beyond description. Beginning always with a soft murmur, he gradually raised his mighty voice into a peal of thunder—I never in my life heard anything so beautiful."

Both on account of the hardships and fatigue involved—which are calculated in the long run to ruin his constitution—and also because he really cannot manipulate his cameras successfully except on starry or moonlight nights, it is most desirable for the photographer to provide himself with an apparatus working automatically. You cannot count upon its working as you would wish. The string which sets it in action may be caught and pulled by a bat or even a cockchafer instead of a lion you want to photograph. The photograph reproduced on p. 697, for instance, was the work of the turtledoves therein visible. The motion of their wings, it may be noted, was too quick for a clearly defined record.

This picture, taken in the early morning, is a good instance of the way in which I have always enforced my rule as to never touching up my photographs. The plate was broken on its way home, but the cracks which resulted were left as they were.[1] I remember one case in which I had put up my apparatus with a view to securing photographs of certain lions, and in which I had to be content with a picture of a spotted hyena splashing its way in full flight through the swamp. The hideous

[1] Flashlight photographs may be taken by daylight, as is proved by this photograph and some of those of rhinoceroses in *With Flashlight and Rifle*.

cowering gait of the animal came out very strikingly on the negative.

There is wide scope for a man's dexterity and resourcefulness in the setting up of a flashlight apparatus. All the qualities that go to the making of a big-game hunter are essential to success in this field also. You have to keep a sharp look-out for the tracks of the different animals and to watch for their appearance, taking up your position in some thorn-bush hiding-place or up a tree if you propose to operate the camera yourself by means of a string. In the case of most animals you have, of course, to pay special attention to the direction of the wind. This is not necessary, however, in the case of lions. Lions take no notice whatever of the man in hiding. Elephants, on the contrary, are very easily excited, and when this is so they are apt to force their way into his thorn retreat and trample on him or to drag him down from his point of vantage.

Future workers in this field will find that my labours have served to some extent to clear the ground for them, and we may look forward to many interesting achievements. There can be no doubt that the explorer who provides himself with the necessary photographic equipment will find ample scope for his activities.

My own process was simple enough. I stretched lines of string round the heifer or goat which was to serve as a bait, and the lions, hyenas, etc., falling on their prey pulled these strings, which worked the flashlight—the animals thus taking their own photographs. Some of these

C. G. Schillings, phot.

MORE ANTELOPES. 1. BLACK-HOOFED ANTELOPE (*ÆPYCEROS SUARA*, Mtsch.), BUCK. 2. MOUNTAIN REEDBUCK (*CERVICAPRA CHANLERI*, Rothsch.). 3. GRANT'S GAZELLE (*GAZELLA GRANTI*, Brooke), DOE. 4. ORYX ANTELOPE (*ORYX CALLOTIS*, Thos.), BUCK.

pictures record new facts in natural history. In my first book, for instance, there is a picture of a lioness making off with her tail raised high in the air in a way no artist would have thought of depicting, and no naturalist have believed to be characteristic.

In the course of my labours I had to overcome every description of obstacle, and had constantly to be making new experiments. By the time I had got things right I had so small a stock of materials left at my disposal that I ought to congratulate myself upon my subsequent success. The number of good pictures I secured was far less than I had originally hoped for, but on the other hand it far surpassed what, in those moods of pessimism which followed upon my many failures, I had begun to think I should have to be contented with.

Among my successful efforts I count those which record the fashion in which the lion falls upon his prey, first prowling round it; and those which represent rhinoceroses and hippopotami, leopards and hyenas and jackals, antelopes and zebras making their way down to the water-side to drink; those also which show the way in which hyenas and jackals carry off their spoils, and the relations that exist between them. But a point of peculiar interest that my photographs bring out is the way in which the eyes of beasts of prey shine out in the darkness of night. I have never been able to get any precise scientific explanation of this phenomenon. I have often seen it for myself in the wilderness. Professor Yngve Sjöstedt, a Swedish naturalist, who has travelled in the Kilimanjaro region, tells us that he once saw, quite near his camp,

the eyes of at least ten lions shining out from the darkness exactly like lights. I find the following passage, too, in an old book, printed at Nuremberg in 1719: "Travellers tell us (and I myself have seen it) that you can follow the movements of lions in the dark owing to the way in which their glowing eyes shine out like twin lights."

Even with a small hand-camera it is possible to secure pictures worth having, such as the studies of heads reproduced on the accompanying pages. These must always have a certain value, as they depict for the most part species of animals which have never yet been secured for zoological gardens.

I repeat that there is an immense harvest awaiting the man who is prepared to work thoroughly in this field. Why, for instance, should he not succeed in getting a picture by night of an entire troop of lions? My photographs show how a mating lion and lioness fall on their victim—from different sides; and how three lionesses may be seen quenching their thirst at midnight, all together. With good luck some one may manage to photograph a troop of a dozen or twenty lions hunting their prey—that would be a fine achievement. Or he might secure a wonderful group of bull-elephants on their way down to a drinking-place. The possibilities are immense.

Who has ever seen a herd of giraffes bending down in their grotesque impossible attitudes to quench their thirst? A photographic record of such a sight would be invaluable now that the species is doomed to extinction. But, apart from such big achievements as these, trustworthy photographs of wild life in all its forms—even of the smallest

PHOTOGRAPHS OF (1) A SPOTTED HYENA (*CROCOTTA GERMINANS*, Mtsch.); (2) AND (4) STRIPED HYENAS (*HYÆNA SCHILLINGSI*, Mtsch.), AND (3) A JACKAL.

beasts and birds—are of the utmost value, especially in the case of rare species that are dying out.

This is true not merely of Africa, but of other parts of the world as well. Who is attempting to secure photographic records of the great elk and mighty bears of

SNAPSHOT OF A JACKAL IN FULL FLIGHT.

Alaska? or of the wild life of the Arctic zone—the polar bear, the walrus, and the seal?

The Arctic regions should be made to tell their last secrets to the camera for the benefit of posterity, nor should the wild sheep and ibex of the unexplored mountains of Central Asia be overlooked.

These things are not to be easily achieved, and they involve a considerable outlay of money. It would be, however, money well spent. Money is being lavished

upon many other enterprises which could very well wait, and which might be carried out just as successfully some time in the future. These are possibilities, on the other hand, that are diminishing every year, and that presently will cease to exist. I trust sincerely that it may be my lot to continue working in this field.

"If only the matter could be brought home to the minds of the right people," wrote one of our best naturalists, after examining my work, "tens of thousands of pounds would be devoted to this end."

GUINEA-FOWL.

Envoi

I MAY be permitted a few words in conclusion to reaffirm certain views to which I cling. I would not have my readers attach any special importance to what I myself have achieved, but I would like them to take to heart the moral of my book.

It may be summed up in a very few words. I maintain that wild life everywhere, and in all its forms, should be religiously protected—that the forces of nature should not be warred against more than our struggle for existence renders absolutely inevitable ; and that it is the sportsman's duty, above all, to have a care for the well-being of the whole of the animal world.

Whoever glances over the terrible list of so-called "harmful" birds and beasts done to death every year in Germany must bemoan this ruthless destruction of a charming feature of our countryside, carried out by sportsmen in the avowed interest of certain species designated

as "useful." The realm of nature should not be regarded exclusively from the point of view of sport; the sportsman should stand rather in the position of a guardian or trustee, responsible to all nature-lovers for the condition of the fauna and flora left to his charge.

I would have the German hunter establish the same kind of reservations, the same kind of "sanctuaries" for wild life that exist in America. In our German colonies, especially in Africa, we should model those reservations on English examples. Such institutions, in which both flora and fauna should be really well looked after, would be a source at once of instruction and enjoyment of the highest kind to all lovers of natural history.

FAREWELL TO AFRICA!

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